

THE
AGRICULTURAL STATISTICS
OF
IRELAND,
FOR THE YEAR
1889.

DIVISION OF LAND; ACREAGE UNDER CROPS;
NUMBER AND SIZE OF HOLDINGS; RATES OF PRODUCE;
NUMBER AND AGES OF LIVE STOCK;
EXPORTS AND IMPORTS OF LIVE STOCK; HONEY PRODUCED;
NUMBER OF SCUTCHING MILLS; SILOS AND ENSILAGE;
THE WEATHER.

Presented to both Houses of Parliament by Command of Her Majesty.



DUBLIN:

PRINTED FOR HER MAJESTY'S STATIONERY OFFICE

BY

ALEXANDER THOM & CO. (LIMITED),

And to be purchased, either directly or through any Bookseller, from
EYRE and SCOTTISWODE, East Harding-street, Fetter-lane, E.C., or 32, Abingdon-street,
Westminster, S.W.; or ADAM and CHARLES BLACK, 6, North Bridge, Edinburgh;
or HODGES, FIGGIS, and Co., 104, Grafton-street, Dublin.

1890.

[C.—6099.] Price 1s. 2d.

CONTENTS.

INTRODUCTORY REMARKS:—

Page

PART I.—TILLAGE; MEADOW AND CROVER; &c.:

TABLE I.—Average under Crops in 1888 and 1889, with proportionate Area under each Crop, ...	4
" II.—Extent of Land and proportionate Area under Crops, Grass, Fallow, Woods and Plantations, and Bog, Waste, Water, &c., in each year from 1880 to 1889, ...	5
" III.—Number of Holdings, by Classes, for each County and Province, in 1888 and 1889, ...	8
" IV.—Approximate Return of the Number of Occupiers resident in each County and Province in 1889, classified according to the total extent of land held, ...	9
" V.—Number of Holdings in each Province in 1841, 1851, 1861, 1871, 1881, and 1889, according to the classification of the Census Commissioners of 1841, ...	10

PART II.—PRODUCE OF THE CROPS:

CONDITIONS INFLUENCING THE PRODUCE OF THE CROPS; NOTES OF SUPERINTENDENTS OF ENUMERATION; THE WEATHER; NEGATIVE ISSUES; WINDS AND NEGATIVE PLANTS, ...	11
TABLE VI.—Total Produce of the principal Crops in 1888 and 1889, and the Increase or Decrease in the latter year, ...	12
" VII.—Estimated Average Produce per Statute Acre of the principal Crops in 1888 and 1889, and the Increase or Decrease in the latter year, ...	13
" VIII.—Extent under each of the principal Crops in Statute Acres, the Total Produce, and the Average Yield per Acre, for each year from 1880 to 1889, ...	13

PART III.—LIVE STOCK:

" IX.—Number and Ages of Live Stock in 1888 and 1889, and the Increase or Decrease in each description for the latter year, ...	14
" X.—Number of Live Stock in each year from 1880 to 1889, ...	15
" XI.—The proportion per cent. of Horses, Cattle, Sheep, and Pigs according to age, from 1880 to 1889, ...	16
" XII.—Number of Milk Cows in each year from 1884 to 1889, ...	18

Exports and Imports of Live Stock, ...	16
Honey produced in 1889, ...	17
Number of Scutching Mills, ...	17
Silos and Stalls, ...	19

SUMMARY TABLES.

TILLAGE; MEADOW AND CROVER; &c.:

TABLE 1.—Number of Holdings, their Size in Statute Acres, and the Division of Land in each County and Province in 1889, ...	20
" 2.—Proportion per cent. of Total Area under Crops, Grass, Fallow, Woods and Plantations, Bog and Marsh, Haven Mountain Land, and Water, Roads, Fences, &c., in each County and Province, ...	20
" 3.—Number of Holdings and Size in Statute Acres, and the Division of Land in 1889 by Poor Law Unions, ...	21
" 4.—Proportion per cent. under Crops, Grass, Fallow, &c., by Poor Law Unions, ...	22
" 5.—Extent of Land under Crops in 1889, Valuation in 1880, and Population in 1881, by Counties and Provinces, ...	24
" 6.—Produce of the Crops in 1889, by Counties and Provinces, ...	26
" 7.—Extent of Land under Crops in 1889, Valuation in 1880, and Population in 1881, by Poor Law Unions, ...	28
" 8.—Produce of the Crops in 1889, by Poor Law Unions, ...	29
" 9.—Number of Holdings exceeding One Acre, the extent of Land under Crops in each year, from 1880 to 1889, by Counties and Provinces, ...	36
" 10.—Average Rates of Produce of Crops per Statute Acre, in each year from 1880 to 1889, by Counties and Provinces, ...	41

LIVE STOCK:

" 11.—Number of Stockholders, and Quantity of Live Stock in 1889, by Counties and Provinces, ...	45
" 12.—Number of Stockholders and Quantity of Live Stock in 1889, by Poor Law Unions, ...	47
" 13.—The Quantity of Live Stock in each year from 1880 to 1889, by Counties and Provinces, ...	51
" 14.—Total Area under Potatoes, and the Export in Statute Acres under each description of that Crop planted in 1889, by Counties and Provinces, ...	55
" 15.—Total Area under Potatoes, and the Export planted of each description of that Crop in 1889, by Poor Law Unions, ...	57
" 16.—The Average Rate of Produce per Acre of each description of Potato planted in Ireland in 1889, by Counties, ...	58

OBSERVATIONS OF DISTRICT-INSPECTORS OF THE ROYAL IRISH CONSTABULARY, and of Sergeants of the Metropolitan Police, on the probable cause of the good or bad yield of the Crops in each of their Districts, ...	59
---	----

APPENDIX.

DETAILS REGARDING SILDS AND ENRIACH furnished by OWNERS and OCCUPIERS of LAND, ...	70
ABSTRACT OF THE METEOROLOGICAL OBSERVATIONS registered at the Ordnance Survey Office, Phoenix Park, Dublin, ...	194
Remarks on the Weather of the year 1889, by J. W. MOORE, Esq., M.D., F.R.S.E., &c., ...	195

OBSERVATIONS

OF THE

AGRICULTURAL STATISTICS OF IRELAND.

FOR THE YEAR 1889.

TO HIS EXCELLENCY LAWRENCE, EARL OF SETLAND,

Esq. Esq. Esq.

LIEUTENANT-GOVERNOR AND GENERAL GOVERNOR OF IRELAND.

MAY IT PLEASE YOUR EXCELLENCY,

I have the honour to present to your Excellency the following Report and detailed Tables concerning Agriculture in Ireland for the year 1889, which have been compiled and arranged in the same manner as those for the previous year.

A review of the detailed Tables confirms the observations I made when presenting the General Abstracts in August last, and the Produce Returns in January of this year.

The following is an analysis of the information contained in the tables:—

PART I.—TILLAGE; MEADOW AND CLOVER; &c.

The acreage under Crops, Grass, Fallow, Woods and Plantations, and Bog, Waste, Water, &c., in 1888 and 1889, was as follows:—

Division of
land, 1888
and 1889.

—	1888.	1889.	Increase or Decrease between 1888 and 1889.	
			Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Under Crops, including Meadow and Clover, . . .	5,140,083	5,055,016	—	84,667
" Grass, or Pasture, ...	9,306,097	9,268,297	37,800	—
" Fallow, ...	12,613	12,460	—	153
" Woods and Plantations, ...	331,567	326,636	—	4,931
" Bog, Waste, Water, &c.,*	4,933,773	4,933,354	—	419
Total,†	20,328,753			

The area under Crops in 1889, compared with 1888 shows a net decrease of 84,667 acres—there being a decrease of 50,209 acres in tillage, and of 76,968 acres in the area under hay on permanent pasture or grass not broken up in rotation; while there is an increase of 42,510 acres under hay on clover, sainfoin, and grasses under rotation. There is an increase of 93,200 acres under Grass, while there is a decrease of 3,163 acres of Fallow land, of 4,951 acres under Woods and Plantations, and of 419 acres under Bog, Waste, Water, &c.

Of the 4,933,354 acres given as under "Bog, Waste, Water, &c." in 1889, 1,770,493 acres were enumerated as "Bog and Marsh," 2,375,733 acres as "Barren Mountain Land," and 889,128 acres as "Water, Roads, Fences, &c." Compared with 1888 "Bog and Marsh" appears to have decreased by 1,957 acres, "Barren Mountain Land" by 3,236 acres, and "Water, Roads, Fences, &c.," shows an increase of 4,776 acres.

The area and proportionate extent of each crop in 1888 and 1889, with the increase or decrease in the latter year, are given in the following Table (I.), from which it appears that, compared with 1888, there was last year a net decrease of 35,852 acres in cereals, wheat having decreased by 9,268 acres, oats by 41,306 acres, and beans and peas by 1,467 acres, while barley increased by 14,854 acres, and bere and rye by 1,935 acres.

Acreage
under crops,
1888 and
1889.

In green crops there was a net decrease of 14,396 acres, potatoes having decreased by 17,332 acres, mangel wurzel by 1,728 acres, vetches and rape by 1,973 acres, and cabbage by 71 acres, while turnips increased by 3,676 acres, and carrots, parsnips, and other green crops by 3,032 acres.

Flax shows an increase of 39 acres, and meadow and clover a decrease of 84,458 acres.

In 1889, 30.4 acres in every 100 under crops were under cereals, 24.1 under green crops, 2.2 under flax, and 43.3 under meadow and clover.

Including 152,005 acres under water. † Excludes of 464,726 acres under the larger rivers, lakes, and gillways.

Varieties of Potatoes. POTATOES.—The tables relating to the potato crop point to several important conclusions. It will be observed (See Table 14, p. 56) that of the 787,234 acres planted with potatoes, 79·5 per cent. belonged to one variety, namely, "Champions," showing no appreciable difference in the percentage of this variety as compared with the previous year. Of the total area under potatoes 7·4 per cent. was under Flounders, 3·7 per cent. under Skerry Blues, 2·0 per cent. under White Rocks, 1·9 per cent. under Magnum Bonums, 1·1 per cent. under Scotch Downs, 1·0 per cent. under Kemps, and 3·4 per cent. under all other varieties. It will be seen by a reference to Table 16 that not only was the Champion variety the one planted in greatest quantity, but that it was generally the most prolific in its yield.

Extent under Crops.

Table 16 also points out the best potato-growing districts in Ireland, and the varieties which appear to thrive best in particular counties.

Of the total extent under crops in 1889, 83·4 per cent., or over four-fifths, were under three crops—oats (24·5), potatoes (15·6), and meadow and clover (43·3).

(TABLE I).—The Acreage under Crops in 1888 and 1889, and the Increase or Decrease in the latter year :—

Crops.	1888.	1889.	1889.		Crops.	1888.	1889.	1889.	
			Increase.	Decrease.				Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.		Acres.	Acres.	Acres.	Acres.
Wheat, ...	29,013	29,745	—	9,268	Flax, ...	113,613	113,652	39	—
Oats, ...	1,280,868	1,235,862	—	41,906					
Barley, ...	170,929	185,783	14,854	—	Total under				
Born and Rye, ...	14,322	16,257	1,935	—	Tillage, ...	2,918,703	2,868,491	—	50,212
Beans and Peas, ...	5,823	4,356	—	1,467					
TOTAL EXTENT					Meadow and				
under CEREAL					Clover :—				
Crops, ...	1,570,945	1,535,083	—	35,862	Clover, Lucerne,				
					and				
Potatoes, ...	804,548	787,234	—	17,313	Grasses	627,752	670,242	42,490	—
Turnips, ...	294,257	297,913	3,656	—	under Rotation,				
Mangel Wurzel									
and Beet Root, ...	45,749	44,021	—	1,728	Permanent				
Cabbages, ...	42,503	42,427	—	71	Pasture or	1,294,248	1,517,280	—	76,992
Vetches and					Grass not				
Rape, ...	15,011	13,038	—	1,973	broken up				
Carrots, Parsnips,					in Rotation,				
& other Green Crops, ...	32,074	35,108	3,032	—					
TOTAL EXTENT					TOTAL EXTENT				
under GREEN					under Crops, ...	5,140,483	5,056,016	—	84,667
Crops, ...	1,254,145	1,219,749	—	14,396					

The Proportionate Area under each of the above Crops in 1888 and 1889 :—

Crops.	Proportion per cent.		Crops.	Proportion per cent.	
	1888.	1889.		1888.	1889.
Wheat, ...	1·9	1·8	Cabbages, ...	0·8	0·8
Oats, ...	24·9	24·5	Vetches and Rape, ...	0·3	0·3
Barley, ...	3·4	3·7	Carrots, Parsnips, and		
Born and Rye, ...	0·3	0·3	other Green Crops, ...	0·6	0·7
Beans and Peas, ...	0·1	0·1	UNDER GREEN CROPS, ...	24·0	24·1
UNDER CEREAL CROPS, ...	30·5	30·4			
Potatoes, ...	15·7	15·6	Flax, ...	2·2	2·2
Turnips, ...	5·7	5·9	Meadow and Clover, ...	43·2	43·3
Mangel Wurzel and Beet					
Root, ...	0·9	0·9	TOTAL, ...	100·0	100·0

Tables showing the extent of land under crops in 1889 by Counties and Provinces, and by Poor Law Unions, and from 1880 to 1889 by Counties and Provinces, are given at pages 24, 28 and 36 respectively.

The extent of land under grass in 1889 (*exclusive of that under meadow and clover*) was 9,938,297 acres, or 49·2 in every 100 of the entire country, against 9,905,097 acres or 48·7 per cent. in 1888. The relative proportions under grass in each Province were—in Munster 53·3 per cent. in 1889, and 53·1 per cent. in 1888; Leinster 53·9 per cent. in 1889, and 53·0 per cent. in 1888; Connaught 48·4 per cent. in 1889, and 47·1 per cent. in 1888; and Ulster 40·9 per cent. in 1889, and 41·3 per cent. in 1888.

Grazing
Land, 1888
and 1889.

There appears to have been an increase of pasture land in 1889 in Leinster of 0·9 per cent. of the total area of the province, in Munster of 0·2 per cent., and in Connaught of 1·3 per cent.; while there has been a decrease of 0·4 per cent. in Ulster.

Of the counties—Limerick, Meath, and Westmeath had each above 60 acres in every 100 of their entire area under grass in 1889; Clare, Fermanagh, Kildare, Kilkenny, Roscommon, and Tipperary had above 55 and under 60 acres; Carlow, Cavan, Cork, Leitrim, Longford, Queen's, Sligo, Waterford, and Wexford had from 50 to 55 acres; Antrim, Dublin, Galway, Kerry, King's, Louth, Mayo, Monaghan, Tyrone, and Wicklow had above 40 and under 50 acres; and Armagh, Donegal, Down, and Londonderry, had over 30 and under 40 acres in every 100 acres under grass in 1889. Only 32·9 per cent. of the total area of Donegal was enumerated in 1889 as under grass, while Meath shows the highest percentage, 70·1.

Grazing
Land in
1889.

The area of each County and Province, and the extent and percentage under grass in 1889, are given at page 20.

Of the total area of Ireland (20,328,753 statute acres),* the land under grass in 1889 was, as already stated, nearly one-half. It appears from the succeeding Table (II.) to have decreased from 50·4 per cent. of the total area in 1880 to 49·2 in 1889, but during the ten years the proportion of grass varied from 50·9 per cent. in 1884 to 48·7 in 1888.

Division of
Land, 1880-
1889.

In Crops a decrease took place from 5,081,084 acres or 25·0 per cent. of the total area in 1880 to 4,872,744 acres, or 24·0 per cent. in 1889, from which date until 1888 there was annually a slight increase, but in 1889 there was a decrease, the extent being 5,036,016, or 24·8 per cent. of the total area, against 25·3 per cent. in 1888.

Fallow or uncropped arable land amounted to 15,406 acres in 1880, and to 12,450 acres in 1889.

Comparing the first and the last years of the decade, Woods and Plantations exhibit a decrease from 339,858 acres to 326,636 acres.

In "Bog, Waste, Water, &c." an increase is shown—from 4,633,297 acres in 1880, to 4,935,354 acres in 1889, the difference being equivalent to 1·5 per cent. of the total area.

TABLE II.—The Extent of Land in Statute Acres, and the proportionate Area, under Crops, Grass, Fallow, Woods and Plantations, and Bog, Waste, Water, &c., in each Year from 1880 to 1889, also the Number of Holdings exceeding 1 Acre :—

Years.	Number of Holdings exceeding 1 Acre.	EXTENT OF LAND IN STATUTE ACRES UNDER					PROPORTION PER CENT. UNDER					
		Crops (including Meadow and Grass &c.)	Grass.	Fallow.	Woods and Plantations.	Bog, Waste, Water, &c.	Total.*	Crops (exclusive of Meadow and Grass &c.)	Grass.	Fallow.	Woods and Plantations.	Bog, Waste, Water, &c.
1880.	302,089	5,051,084	10,320,108	15,406	339,858	4,633,297	20,328,753	24·8	50·4	0·1	1·7	22·8
1881.	306,743	5,150,370	10,070,424	21,204	320,703	4,736,047	20,298,748	25·5	49·6	0·1	1·8	22·9
1882.	325,212	5,031,338	10,109,078	21,205	325,199	4,787,523	20,274,343	24·9	49·7	0·1	1·9	23·4
1883.	318,684	4,936,701	10,102,647	24,824	331,243	4,863,520	20,260,935	24·2	50·1	0·1	1·7	23·9
1884.	323,445	4,872,744	10,345,876	23,881	332,000	4,713,486	20,328,086	24·5	50·9	0·1	1·7	23·8
1885.	315,269	4,937,127	10,352,190	18,113	339,447	4,771,047	20,417,023	24·4	50·4	0·1	1·8	23·9
1886.	315,459	5,035,118	10,169,707	17,828	329,662	4,736,241	20,488,556	24·5	50·0	0·1	1·8	23·6
1887.	312,203	5,055,857	10,109,807	17,746	329,263	4,821,489	20,234,262	24·6	49·4	0·1	1·8	24·0
1888.	314,692	5,140,005	9,900,087	15,613	325,467	4,958,773	20,140,045	25·3	48·7	0·1	1·9	24·0
1889.	318,048	5,066,016	9,999,297	12,450	326,636	4,951,354	20,047,528	24·8	49·2	0·1	1·9	24·0

Tables showing the extent of land and the proportionate area under Crops, Grass, Fallow, Woods and Plantations, Bog and Marsh, Barren Mountain Land, and Water, Roads, Fences, &c., in 1889, by counties and provinces, will be found at page 20. From these it appears that there are six counties with upwards of 100,000 acres under "Bog and Marsh," viz. :—Mayo, with 343,767 acres, or 26·1 per cent. of its entire area; Galway, 231,364 acres, or 15·4 per cent.; Donegal, 169,009 acres, or 14·3 per cent.; King's, 114,778 acres, or 23·3 per cent.; Kerry, 126,870 acres, or 10·9 per cent., and Cork, 100,647 acres, or 5·5 per cent. The following counties contain the smallest areas under "Bog and Marsh," viz. :—Dublin, 755 acres, or 0·3 per cent. of its entire area; Louth, 2,930 acres, or 1·4 per cent.; Monaghan, 6,428 acres, or 2·0 per cent.; and Carlow, 5,936 acres, or 2·7 per cent.; 727,497 acres in the province of Connaught, being 17·2 per cent. of its entire area, are returned as under "Bog and Marsh," including 83,478 acres, or 14·3 per cent. of the County Roscommon, in addition to the large extent in Mayo and Galway as before mentioned.

Bog and
Marsh, 1889.

Barren
Mountain
Land, 1889.

"Barren Mountain Land" covers an area of 100,000 acres and upwards in the following seven counties, viz.:—Donegal, 327,542 acres, or 27·6 per cent. of its entire area; Kerry, 298,517 acres, or 25·7 per cent.; Galway, 285,251 acres, or 15·7 per cent.; Cork, 255,468 acres, or 18·9 per cent.; Mayo, 203,434 acres, or 15·4 per cent.; Tyrone, 112,080 acres, or 14·5 per cent.; and Wicklow, 120,229 acres, or 24·1 per cent.

14·5 per cent. of Sligo, or 65,428 acres, 7·3 per cent., or 77,087 acres of Tipperary, and 17·5 per cent., or 79,893 acres of Waterford are under "Barren Mountain Land." The counties containing the smallest areas under "Barren Mountain Land" are Meath with 632 acres, or 0·1 per cent. of its entire area; Longford, 1,674 acres, or 0·6 per cent.; Westmeath, 530 acres, or 0·1 per cent.; Kildare, 2,227 acres, or 0·6 per cent.; and Monaghan, 4,922 acres, or 1·5 per cent. Only 217,881 acres, or 4·5 per cent. of Leicesters are returned as being under "Barren Mountain Land," while 819,429 acres, or 18·8 per cent. of Munster; 688,837 acres, or 12·9 per cent. of Ulster; and 549,606 acres or 13·0 per cent. of Connaught are so returned.*

Very little variation is exhibited in the proportionate area under "Water, Roads, Fences, &c." in the several counties and provinces. In the counties the highest percentage is 7·5 in Dublin, and the lowest 3·2 in Roscommon and Wicklow. 889,128 acres (including 183,035 acres under water), or 4·4 per cent. of the entire area of the country, were returned in 1889 as "Water, Roads, Fences, &c." This, however, does not include the acreage under the larger rivers, lakes and tideways. See note (†), page 3.

A table showing the division of land by Poor Law Unions is given at pages 21 and 22.

According to the returns for 1889, the number of separate holdings was 585,975, being 3,333 more than in the previous year. The holdings which increased in number were—those "not exceeding 1 acre" by 1,978; those "above 1 and not exceeding 5 acres" by 1,324; "above 5 and not exceeding 15 acres" by 415; those "above 50 and not exceeding 100 acres" by 44; those "above 100 and not exceeding 200 acres" by 129; and those "above 500 acres" by 24. The holdings which decreased in number were those "above 15 and not exceeding 30 acres" by 215; those "above 30 and not exceeding 50 acres" by 361; and those "above 200 and not exceeding 500 acres" by 5.

Water,
Roads,
Fences, &c.,
1888 and
1889.

Size of Holdings.	Number in 1888.	Number in 1889.	Increase or Decrease in 1889.	
			Increase.	Decrease.
Not exceeding 1 Acre, ...	47,951	49,929	1,978	—
Above 1 and not exceeding 5 Acres, ...	68,246	69,570	1,324	—
" 5 " 15 "	105,146	105,561	415	—
" 15 " 30 "	135,311	135,096	—	215
" 30 " 50 "	75,763	72,402	—	361
" 50 " 100 "	56,476	56,520	44	—
" 100 " 200 "	22,756	22,885	129	—
" 200 " 500 "	8,372	8,396	—	5
Above 500 Acres, ...	1,681	1,705	24	—
Total, ...	582,642	585,975	3,333	—

* With reference to the question whether waste land is increasing or decreasing in Ireland, the following from a Paper read by Dr. Grimsdale before the Statistical and Social Inquiry Society of Ireland on the 29th of April, 1894, may be of interest:—

"The following Table shows that so far from the waste land of Ireland being on the increase, an immense amount of waste land has been reclaimed during the past forty years.

"DIVISION OF LAND IN 1841, '51, '61, '71, AND '81.

Division of Land.	1841.	1851.	1861.	1871.	1881.
	Statute Acres.	Statute Acres.	Statute Acres.	Statute Acres.	Statute Acres.
Under Crops (including Meadows), ...	21,484,100	21,803,061	22,820,220	24,020,027	24,100,375
Grass, ...	11,484,100	11,703,061	12,820,220	13,020,027	13,100,375
Woods and Plantations, ...	294,002	294,000	212,500	212,500	212,500
Barren Mountain Land, ...	—	—	—	—	—
Waste Land, &c., ...	4,485,901	4,425,900	4,389,500	4,311,500	4,287,500
Total, ...	—	—	—	20,726,727	—

NOTE.—The information for 1841 and 1851, respectively, has been obtained from the Census Reports for those years; and that for the subsequent periods from the Agricultural Statistics.

A more extended Extract from the Paper above referred to was printed in the Agricultural Statistics Reports for 1889 and 1890 by the University of Southampton Library Digitisation Unit

A table showing the number of holdings, by classes, for each Poor Law Union, in 1889, will be found on pp. 21 and 22.

The number of separate holdings in each county and province, in 1888 and 1889, is given by classes in Table III. at page 8.

As in many instances landholders occupy more than one farm, and as, in other cases, farms extend into two or more townlands—the portion in each townland being enumerated and classified as a separate holding—it has been considered desirable, with the view of ascertaining the number of Occupiers, and of classifying them according to the total extent of land held by each, to obtain a Return of the number of persons having more than one farm or holding. Each Enumerator is, therefore, required to furnish the name of every landholder residing in his district who has two or more farms, or whose farm extends into two or more townlands, together with the area of each portion, and the locality in which it is situated. The number of actual occupiers in 1889 thus arrived at is given in Table IV., page 9, by counties and provinces. On comparing the results in this Table with the figures given in Table III., it appears that in 1889 there were 565,975 holdings in the hands of 525,152 occupiers.

The number of separate holdings and the number of occupiers in each Province in 1888 and 1889 were :—

Province.	Number of Separate Holdings.		Number of Occupiers.	
	1888.	1889.	1888.	1889.
Leinster, . . .	120,668	120,904	108,384	108,791
Munster, . . .	122,257	123,255	111,198	112,334
Ulster, . . .	108,779	200,504	187,460	189,418
Connaught, . . .	121,040	121,302	114,423	114,609
Total, . . .	562,644	565,975	521,465	525,152

The number of occupiers of land in 1889 was 525,152, being 3,687 more than in the previous year.

Excluding those holding land "not exceeding one acre," who are to a great extent merely occupiers of small gardens, they numbered 473,817 in 1889, or 1,702 more than in 1888. There was a decrease in Leinster of 54—from 92,781 in 1888 to 92,727 in 1889; but an increase in Munster of 319—from 99,442 in 1888 to 99,761 in 1889; in Ulster of 1,182—from 172,839 in 1888 to 174,021 in 1889; and in Connaught of 255—from 109,033 in 1888 to 109,308 in 1889. The increase in occupiers holding land above 1 and not exceeding 50 acres was 1,335 and the number holding land exceeding that acreage increased by 367.

TABLE III.—The number of Holdings, by classes, for each County and Province, in 1886 and 1889, and the increase or decrease in the latter year:—

COUNTIES.	TENSURE AND CHARACTERIZATION OF HOLDINGS.										Totals.
	Not exceeding 1 Acre.	Above 1 and not exceeding 2 Acre.	Above 2 and not exceeding 10 Acres.	Above 10 and not exceeding 20 Acres.	Above 20 and not exceeding 50 Acres.	Above 50 and not exceeding 100 Acres.	Above 100 and not exceeding 200 Acres.	Above 200 and not exceeding 500 Acres.	Above 500 Acres.		
ANTRIM, ...	1886 1,572	2,902	5,473	5,179	2,537	2,331	665	142	61	71,535	
1889 1,494	2,136	5,129	5,166	2,621	2,397	574	131	49	59	72,014	
ARMS, ...	1886 1,755	8,285	4,275	4,275	2,255	2,255	27	27	2	26,218	
1889 1,718	8,252	4,257	4,257	2,255	2,255	245	25	25	2	26,254	
CARLOW, ...	1886 289	285	687	944	831	837	284	157	7	4,492	
1889 289	622	644	844	830	830	253	130	0	0	4,492	
CATY, ...	1886 939	1,252	7,094	8,380	2,455	921	291	52	8	26,507	
1889 1,259	1,498	7,149	8,325	2,454	930	292	50	8	8	26,648	
CLARE, ...	1886 1,101	1,271	2,574	4,729	3,013	2,999	851	350	51	77,232	
1889 1,245	1,288	4,025	4,790	3,027	2,936	839	382	45	45	77,270	
CORK, ...	1886 5,425	2,555	4,235	5,425	7,776	3,210	555	60	60	35,431	
1889 5,067	2,372	4,087	5,425	6,700	7,819	3,244	555	70	70	35,490	
DUBLIN, ...	1886 1,566	2,552	10,224	8,221	4,448	3,000	844	327	130	41,271	
1889 1,464	2,562	10,221	8,221	4,441	3,224	1,070	880	110	110	41,200	
DOW, ...	1886 4,622	5,708	3,244	5,711	1,711	1,711	225	81	18	26,722	
1889 5,141	5,560	3,141	5,907	1,644	1,644	225	81	18	18	26,722	
DUMKIN, ...	1886 2,125	1,744	1,843	944	514	622	380	184	23	15,554	
1889 2,266	1,733	1,555	944	514	622	380	184	23	23	15,554	
FERRISBURGH, ...	1886 741	1,514	1,349	4,260	2,260	1,245	325	50	10	15,554	
1889 721	1,525	1,324	4,260	2,260	1,244	340	54	10	10	15,554	
GALWAY, ...	1886 1,741	4,235	12,257	8,545	3,547	3,547	1,288	754	550	35,560	
1889 1,741	4,235	12,257	8,545	3,547	3,547	1,288	754	550	550	35,560	
KERRY, ...	1886 1,105	1,419	2,715	3,546	3,546	3,546	620	328	138	26,525	
1889 1,071	1,408	2,680	3,527	3,527	3,527	622	325	138	138	26,525	
KILKENNY, ...	1886 1,105	1,419	2,715	3,546	3,546	3,546	620	328	138	26,525	
1889 1,071	1,408	2,680	3,527	3,527	3,527	622	325	138	138	26,525	
KILKENNY, ...	1886 1,105	1,419	2,715	3,546	3,546	3,546	620	328	138	26,525	
1889 1,071	1,408	2,680	3,527	3,527	3,527	622	325	138	138	26,525	
KNOX, ...	1886 1,105	1,419	2,715	3,546	3,546	3,546	620	328	138	26,525	
1889 1,071	1,408	2,680	3,527	3,527	3,527	622	325	138	138	26,525	
LEITH, ...	1886 493	737	1,185	3,235	1,773	692	176	33	10	14,227	
1889 507	854	1,077	3,235	1,799	694	184	34	40	7	14,301	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	14,007	
1889 1,500	1,500	2,500	3,500	2,500	2,500	250	250	250	250	14,007	
LONGFORD, ...	1886 1,500	1,500	2,500	3,500	2,500	2,500					

TABLE IV.—Return of the number of Occupiers resident in each County and Province in 1889, classified according to the *total extent* of land held, without reference to the Townland, Poor Law Union, County, or Province in which the portions of land are situated:—

COUNTY.	NUMBER OF OCCUPIERS HOLDING LAND										TOTAL.
	Not exceeding 1 Acre.	Above 1 and not exceeding 5 Acres.	Above 5 and not exceeding 10 Acres.	Above 10 and not exceeding 20 Acres.	Above 20 and not exceeding 50 Acres.	Above 50 and not exceeding 100 Acres.	Above 100 and not exceeding 200 Acres.	Above 200 and not exceeding 500 Acres.	Above 500 Acres.		
Armagh	1,483	1,965	4,073	5,421	3,181	5,524	672	187	56	26,233	
Armagh, Borough	1,780	2,183	5,063	4,518	1,567	514	128	35	6	15,257	
Cavan	877	877	738	819	720	767	829	382	26	4,576	
County	1,000	1,511	3,364	6,428	2,547	363	221	83	14	18,736	
Cork	1,291	1,130	2,876	4,242	3,284	2,544	887	377	61	18,287	
Cork, City	8,084	1,599	3,533	5,548	1,534	7,067	5,379	376	146	36,026	
Down	1,270	1,580	2,680	3,143	2,525	1,168	1,023	354	116	26,170	
Down, County	5,182	2,270	5,820	4,084	2,800	1,734	484	96	50	29,473	
Dublin	2,581	1,038	1,485	968	688	498	381	199	29	7,081	
Dublin, City	241	840	3,130	3,921	2,126	1,155	389	108	31	25,496	
Donegal	1,673	4,834	31,872	9,507	8,537	2,048	1,138	875	308	55,182	
Galway	1,337	1,581	3,646	3,567	2,525	3,000	1,536	636	134	18,715	
Gloucester	1,450	1,513	1,838	1,383	1,209	794	661	360	32	7,946	
Gloucester, City	1,463	1,507	1,886	1,705	1,351	1,010	620	283	27	15,005	
Leinster	409	753	4,619	4,963	3,747	1,28	178	43	12	15,005	
Leinster, County	2,813	1,862	2,907	3,033	2,472	2,023	1,881	841	64	14,620	
Leinster, County	1,103	1,091	5,119	4,255	2,245	1,980	441	140	34	16,505	
Leinster, County	693	693	3,418	2,433	1,941	553	342	79	16	7,090	
Leinster and Douglas, Co. of	1,857	1,268	3,159	1,383	881	411	581	158	31	7,280	
Munster	1,564	3,399	14,426	8,448	3,733	1,012	710	456	260	34,786	
North	1,777	1,491	2,548	2,701	371	1,021	754	404	141	10,586	
Monaghan	799	1,836	7,174	4,231	1,474	894	136	30	8	16,714	
Queen's	1,394	1,403	2,909	1,780	1,567	1,040	406	385	60	9,989	
Rockingham	768	2,817	7,008	2,533	1,509	836	484	180	77	18,026	
Ripon	819	1,379	4,303	4,280	1,908	783	552	184	43	14,763	
Tynemouth	2,168	2,854	8,593	5,417	3,593	1,587	1,287	684	142	20,303	
Tynes	1,864	2,708	7,292	7,461	3,748	2,455	811	174	46	24,316	
Waterford	2,113	1,107	1,104	1,115	1,608	1,407	794	273	58	8,542	
Watermouth	1,426	1,513	2,963	7,915	1,105	929	464	581	66	6,872	
Wexford	1,613	1,803	2,507	2,434	2,368	3,371	897	268	45	15,037	
Wicklow	507	698	1,132	1,362	1,113	1,197	768	501	180	7,102	
SUMMARY OF IRELAND.											
PROVINCES.											
Leinster	10,664	16,132	22,416	18,087	13,286	10,241	6,539	2,033	710	108,781	
Munster	12,573	8,963	16,616	21,194	10,069	20,801	1,585	8,119	620	112,254	
Ulster	15,267	16,313	61,675	80,894	24,386	42,706	1,593	1,593	832	165,618	
Connaught	6,761	11,623	44,045	33,618	19,773	5,793	2,310	1,488	543	114,869	
Total of Ireland	45,325	53,031	146,154	133,037	67,570	87,623	22,330	4,266	2,765	388,162	

The following statement shows the number of occupiers of land in each year from 1883 to 1889, by Provinces:—

Number of Occupiers of Land, 1883 to 1889.

Provinces.	Number of Occupiers in the Years						
	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Leinster	168,897	168,800	167,976	168,637	168,882	168,384	168,791
Munster	110,911	109,343	110,183	110,318	111,313	111,198	112,334
Ulster	187,973	187,896	184,572	186,517	187,504	187,460	189,418
Connaught	116,059	114,886	115,023	114,805	114,803	114,423	114,803
IRELAND	523,860	520,724	521,866	523,277	522,181	521,465	525,152

The number of holdings "above 1 and not exceeding 5 acres" diminished greatly between 1841 and 1889. In Leinster the decrease was 65·1 per cent.; in Munster 81·2; in Ulster 79·6; in Connaught 87·6; and in all Ireland 80·2 per cent.

In the same period holdings "above 5 and not exceeding 15 acres" also diminished in number; the decrease in all Ireland was 38·1 per cent.; it was—in Leinster 44·3 per cent.; in Munster 69·6; and in Ulster 33·9; while in Connaught these holdings increased 2·4 per cent.

Holdings "above 15 and not exceeding 30 acres" increased 7·3 per cent. in Leinster; 116·3 per cent. in Ulster; and 482·8 per cent. in Connaught. They decreased 12·0 per cent. in Munster; while in all Ireland they increased 70·3 per cent.

Increase or decrease in Holdings by Classes between 1841 and 1889.

Holdings "above 30 acres" increased 119·5 per cent. in Leinster; 240·4 in Munster; 353·0 in Ulster; 426·2 in Connaught; and 234·8 per cent. in all Ireland.

The total number of holdings "above 1 acre" decreased between 1841 and 1889 by 22·4 per cent. in Leinster; 32·5 per cent. in Munster; 21·8 in Ulster; and 25·7 in Connaught.

The total number of holdings in Ireland "above 1 acre" was 691,202 in 1841; 570,338 in 1851; 568,484 in 1861; 544,142 in 1871; 526,743 in 1881; and 516,046 in 1889, showing a decrease of 175,156 or 25·3 per cent. in the period between 1841 and 1889.

TABLE V.—The number of Holdings above 1 acre in each Province in 1841, 1851, 1861, 1871, 1881, and 1889, according to the classification used by the Census Commissioners of 1841 (in which "above 30 acres" was the maximum); the increase or decrease in the numbers in each class, and the difference per cent., between 1841 and 1889:—

Number of Holdings in 1841, 1851, 1861, 1871, 1881, and 1889.

Size of Holdings.	Leinster.	Munster.	Ulster.	Connaught.	Total.
	Number.	Number.	Number.	Number.	Number.
Above 1 and not exceeding 5 Acres, ...	{ 1841, 50,110 1851, 22,731 1861, 23,848 1871, 21,459 1881, 18,804 1889, 17,501	{ 1841, 67,857 1851, 14,300 1861, 13,736 1871, 12,392 1881, 24,332 1889, 20,872	{ 1841, 102,215 1851, 29,709 1861, 26,458 1871, 24,332 1881, 21,971 1889, 20,819	{ 1841, 100,264 1851, 18,463 1861, 19,427 1871, 16,856 1881, 15,200 1889, 12,388	{ 1841, 310,436 1851, 85,283 1861, 86,469 1871, 74,809 1881, 67,071 1889, 61,790
Decrease in number between 1841 and 1889, ...	32,609	46,985	81,396	87,876	248,866
Rate per cent., ...	89·1	81·2	79·5	87·9	80·2
Above 5 and not exceeding 10 Acres, ...	{ 1841, 46,039 1851, 35,638 1861, 29,615 1871, 27,275 1881, 26,648 1889, 25,429	{ 1841, 61,753 1851, 24,355 1861, 21,959 1871, 20,469 1881, 19,747 1889, 18,775	{ 1841, 99,605 1851, 85,176 1861, 82,083 1871, 73,647 1881, 68,362 1889, 65,877	{ 1841, 45,402 1851, 49,355 1861, 50,404 1871, 50,052 1881, 49,888 1889, 46,480	{ 1841, 252,799 1851, 191,854 1861, 183,951 1871, 171,383 1881, 184,345 1889, 166,861
Increase or Decrease in number between 1841 and 1889, ...	20,810	42,978	33,728	1,078	96,596
Rate per cent., ...	44·8	69·6	33·9	2·4	38·1
Above 10 and not exceeding 30 Acres, ...	{ 1841, 20,688 1851, 26,605 1861, 24,225 1871, 23,443 1881, 22,623 1889, 22,810	{ 1841, 27,611 1851, 28,856 1861, 26,805 1871, 25,534 1881, 26,680 1889, 24,287	{ 1841, 25,219 1851, 67,551 1861, 67,660 1871, 66,878 1881, 65,227 1889, 54,559	{ 1841, 5,824 1851, 28,799 1861, 32,566 1871, 32,702 1881, 32,913 1889, 53,940	{ 1841, 79,843 1851, 141,811 1861, 141,561 1871, 138,647 1881, 137,793 1889, 136,696
Increase or Decrease in number between 1841 and 1889, ...	1,622	3,324	29,340	28,116	66,754
Rate per cent., ...	7·8	12·0	116·3	482·8	70·3
Above 30 Acres, ...	{ 1841, 17,943 1851, 38,696 1861, 39,384 1871, 38,531 1881, 39,479 1889, 39,576	{ 1841, 18,055 1851, 53,074 1861, 58,833 1871, 62,428 1881, 66,141 1889, 66,736	{ 1841, 9,555 1851, 37,813 1861, 39,464 1871, 41,071 1881, 42,810 1889, 43,741	{ 1841, 4,362 1851, 20,107 1861, 23,152 1871, 22,273 1881, 21,708 1889, 22,354	{ 1841, 48,895 1851, 149,690 1861, 157,833 1871, 159,303 1881, 159,834 1889, 162,799
Increase in number between 1841 and 1889, ...	21,436	40,061	34,086	18,992	114,174
Rate per cent., ...	119·5	240·4	333·9	436·2	234·8
TOTAL ABOVE 1 ACRE, ...	{ 1841, 134,760 1851, 122,871 1861, 116,973 1871, 111,478 1881, 106,950 1889, 104,618	{ 1841, 163,896 1851, 126,494 1861, 118,533 1871, 114,733 1881, 112,014 1889, 110,660	{ 1841, 236,694 1851, 210,349 1861, 207,636 1871, 195,828 1881, 185,070 1889, 184,968	{ 1841, 155,842 1851, 116,424 1861, 123,443 1871, 121,863 1881, 119,709 1889, 116,772	{ 1841, 691,202 1851, 570,338 1861, 568,484 1871, 544,142 1881, 526,743 1889, 516,046
Decrease in number between 1841 and 1889, ...	30,142	53,236	51,626	40,070	175,156
Rate per cent., ...	22·4	32·5	21·8	25·7	25·3

PART II—THE PRODUCE OF THE CROPS.

The Tables relating to the produce of the crops have been carefully compiled from information obtained by members of the Royal Irish Constabulary and of the Metropolitan Police from practical farmers and other persons qualified to form an opinion as to the yield in that *Poor Law Electoral Division* (adopted since 1856, instead of Constabulary Districts), for which they were requested to afford the information. The names and residences of the parties co-operating and assisting are stated by the Enumerators on the Returns.

Made out selecting the Returns of Produce.

CONDITIONS INFLUENCING THE PRODUCE OF THE CROPS.

Notes of Superintendents of Enumeration.

On pp. 60 to 69 will be found the observations of the District Inspectors of the Royal Irish Constabulary and of the Sergeants of the Metropolitan Police, who acted as Superintendents of Enumeration, in reply to a circular requesting their opinion on the probable cause to which the good or bad yield of the various crops, in each of their districts, may be attributed.

The Weather.

The Weather being a potent factor in influencing the produce of the crops, both as to quantity and quality, the following particulars and those given on pages 125-144 are inserted by the kind permission of the Editor of the Dublin Journal of Medical Science: they have been derived from Returns of Meteorological Observations taken in Dublin City during the years 1869-89, by J. W. Moore, Esq., M.D., F.R.Q.C.P.L., F.R.M.S.O.; and published in the Journal during the years 1889-90. The Tables on pages 145-7 also, are founded on Dr. Moore's observations:—

The Weather.

The mean Atmospheric Pressure has been obtained from daily readings of the barometer at 9 A.M. and 9 P.M., corrected and reduced to 32° Fahrenheit at the mean sea level. The Mean Temperature values have been deduced from the maximal and minimal readings of the thermometer in the shade by Kaemtz's Formula, viz. $\text{min.} + (\text{max.} - \text{min.} \times .41) = \text{Mean Temperature}$. The Rainfall is that measured daily at 9 A.M. A rainy day is one on which at least one-hundredth (0.01) of an inch of rain falls within the twenty-four hours from 9 A.M. to 9 P.M.

The Mean Height of the Barometer during the year 1889 was 29.965 inches. The highest observed reading was 30.730 inches at 9 P.M. on December 24th. The lowest observed reading was 28.790 inches, at 4 A.M. on October 7th. The extreme range of atmospheric pressure was 1.940 inches compared with 2.130 inches in 1888.

The Mean Temperature of the year, deduced from the maximal and minimal readings of the thermometer in the shade by Kaemtz's Formula, was 48.9°. The highest reading was 77.8° on July 6th; the lowest reading was 21.7° on February 11th. The average mean temperature for the years 1860-88 calculated in the same way, was 48.6°. The mean temperature deduced from the daily readings of the dry bulb thermometer at 9 A.M. and 9 P.M. was 49.3°.

Rain fell on 193 days, including snow or sleet on 15 days, and hail on 23 days. The average number of rainy days in the years 1860-88 was 196.5. The total rainfall measured 27.272 inches, compared with an average of 27.982 inches in the twenty years 1860-88. During the first half of 1889 (January to June, inclusive) the rainfall was 10.376 inches on 97 days; during the second half (July to December, inclusive) 16.696 inches fell on 96 days.

As regards the Direction of the Wind, 730 observations were made during the year, with this result—N., 65; N.E., 46; E., 55; S.E., 58; S., 73; S.W., 98; W., 181; N.W., 112; Calms, 42.

Noxious Insects.

The ravages of noxious insects are frequently mentioned in the notes of the Superintendents of Enumeration. These insects have hitherto attracted but little notice in Ireland as compared with Great Britain and Foreign Countries. Mr. Matheson, the Secretary of this Department, has given a great deal of attention to the natural history of insect pests and the injuries inflicted on crops by them, and has kindly placed at my disposal some valuable notes which he has compiled with regard to this subject, accompanied by illustrative drawings. I propose as soon as possible to publish these notes with the view of supplying the Superintendents of Enumeration and others interested in the question with accurate information regarding noxious insects. Mr. Matheson received the kind advice and assistance of several distinguished entomologists when preparing his interesting paper which will be issued as a supplement to this Report together with some notes on noxious weeds.

Noxious Insects.

*Weeds and Noxious Plants.*Weeds and
Noxious
Plants.

For many years it was the custom of the late Mr. Donnelly, when Registrar-General, to point out the great injury done to crops by the very plentiful distribution of weeds in Ireland. Weeds not only interfere with the growth of the crops with which they are mingled but also exhaust the ground; in some cases are injurious to cattle, and even, though in rare instances, produce seeds which when mixed with grain produce poisonous effects on the consumers of food made from such grain. Besides weeds, properly so called, there are several injurious fungi which damage crops, fruits, trees, and vegetables of various kinds.

Mr. Donnelly issued circulars at various times warning farmers and others against the injurious effects of weeds. It is probable that these circulars would have had better effect if accompanied by more detailed information concerning the pests which they dealt with. I propose to endeavour to remedy this defect by issuing with the supplement on noxious insects some detailed information on noxious weeds. As in the case of the insects, Mr. Matheson and I have been much aided in arranging the information on the subject by scientific friends.

Total pro-
duce in 1888
and 1889.

Comparing the total produce of the crops in 1889 with the total in 1888—the returns for 1889 are, with the exception of flax and hay, of a satisfactory character. In Cereal Crops, there is an increase in wheat of 68,224 cwt.; in oats of 2,007 cwt.; in barley of 540,563 cwt.; in bere of 1,096 cwt.; in rye of 16,383 cwt.; and in beans of 3,271; there is a decrease in pease of 530 cwt.

In Green Crops, there is an increase in potatoes of 324,415 tons in 1889 compared with 1888, an increase of 583,171 tons in turnips, of 31,584 tons in mangel wurzel and beet root, and of 45,177 tons in cabbage.

Flax shows a decrease of 197,179 stones of 14 lbs.; hay on clover, sainfoin, and grasses under rotation, an increase of 91,586 tons; while hay on permanent pasture or grass not broken up in rotation, shows a decrease of 418,531 tons.

Estimated
average
produce per
acre in 1888
and 1889.

The yield per acre of cereal crops in 1889 compared with that of 1888 shows an increase in wheat of 2.2 cwt.; in oats of 0.4 cwt.; in barley of 1.7 cwt.; in beans of 5.6 cwt.; and in pease of 0.4 cwt., while there is a decrease in bere of 0.3 cwt., and in rye of 0.5 cwt. In other crops—potatoes show an increase of 0.5 ton; turnips of 1.8 ton; mangel wurzel and beet root of 1.2 tons; and cabbage of 1.1 tons. Hay on clover, sainfoin, and grasses under rotation shows the same rate in both years, and hay on permanent pasture or grass not broken up in rotation, decreased by 0.2 ton. Flax shows a decrease of 1.7 stones.

The total produce of the principal crops in 1888 and 1889, and the increase or decrease in the latter year, are given in Table VI.; the average produce per statute acre in Table VII.; and in Table VIII. are given the total extent under each of the principal crops, the estimated average yield per statute acre, and the total produce, for each year from 1880 to 1889, inclusive.

Produce of
the Crops,
1888-89.

TABLE VI.—The total produce of the principal Crops in 1888 and 1889, and the increase or decrease in the latter year:—

Crops.	Produce.		Increase in 1889.	Decrease in 1889.
	1888.	1889.		
Wheat, Cwts. of 112 lbs., . . .	1,367,939	1,436,163	68,224	—
Oats, " " " " . . .	17,630,638	17,632,645	2,007	—
Barley, " " " " . . .	2,701,859	3,242,322	540,563	—
Bere, " " " " . . .	5,043	6,139	1,096	—
Rye, " " " " . . .	187,032	203,435	16,383	—
Beans, " " " " . . .	63,999	67,270	3,271	—
Pease, " " " " . . .	8,669	8,139	—	530
Potatoes, " " in Tons, . . .	2,323,297	2,647,712	324,415	—
Turnips, " " " " . . .	3,310,651	3,909,823	583,171	—
Mangel Wurzel and Beet Root, } " " . . .	890,065	921,639	31,584	—
Cabbage, " " " " . . .	383,848	431,025	45,177	—
Flax, in Stones of 14 lbs., . . .	3,295,700	3,098,521	—	197,179
Hay, in Tons, { Clover, Sainfoin, and Grasses under Ro- tation, . . . Permanent Pasture or Grass not broken up in Rotation, . . .	1,388,738	1,478,344	91,586	—
	3,794,188	3,375,657	—	418,531

TABLE VII.—The estimated average produce per statute acre of the principal crops in 1888 and 1889, and the increase or decrease in 1889 compared with 1888.—

Average produce of Crops in 1888 and 1889.

Crops.	Produce per Statute Acre.		Increase in 1889.	Decrease in 1889.
	1888.	1889.		
Wheat, in Cwts. of 112 lbs.,	13·6	16·0	2·2	—
Oats, " " "	13·6	14·2	0·4	—
Barley, " " "	15·6	17·5	1·7	—
Bone, " " "	13·5	13·0	—	0·5
Rye, " " "	13·4	12·9	—	0·5
Beans, " " "	12·6	13·3	0·6	—
Pease, " " "	11·8	12·3	0·4	—
Potatoes, in Tons,	3·1	3·6	0·5	—
Turnips, " " "	11·8	13·1	1·8	—
Mangel Wurzel and Beet Root, " " "	12·9	14·1	1·2	—
Cabbages, " " "	9·1	10·2	1·1	—
Flax, in Stones of 14 lbs.,	29·0	27·3	—	1·7
Hay, in Tons, { Clever, Sainfoin, and Grasses under Ro- tation, " " "	2·2	2·2	—	—
Permanent Pasture or Grass not broken up in Rotation, " " "	2·4	2·3	—	0·3

The further statement contained in Table VIII. gives a general view of the state of agriculture during the year 1889 as compared with preceding years.

Tables showing the total produce of the Crops in 1889, by counties and provinces, will be found at page 26, and by poor law unions at page 32. The average rates by counties and provinces for each year from 1880 to 1889, are given at pages 41 to 45.

TABLE VIII.—The extent under each of the principal Crops—the average Yield per Statute Acre, and the total Produce for all Ireland, in each year from 1880 to 1889, inclusive.

Years.	EXTENT UNDER CROPS IN STATUTE MEASURE.									
	Wheat.	Oats.	Barley.	Bone.	Rye.	Peas.	Turnips.	Mangel Wurzel and Beet Root.	Cabbages.	Flax.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1880.	165,708	1,355,429	918,116	540	7,137	578,034	305,085	41,515	36,603	187,540
1881.	155,794	1,395,312	918,053	474	7,688	555,259	320,212	44,766	36,468	147,145
1882.	155,224	1,407,407	1,022,294	353	7,723	537,918	324,079	35,316	36,346	118,484
1883.	164,146	1,501,945	1,033,381	310	7,758	536,167	336,199	37,945	35,515	148,545
1884.	172,830	1,542,444	1,077,060	345	7,145	555,635	344,041	34,941	35,472	153,225
1885.	171,067	1,559,868	1,077,133	344	8,356	537,032	356,084	37,378	43,127	168,167
1886.	165,445	1,551,883	1,015,008	308	10,570	530,847	325,328	37,413	40,819	157,890
1887.	172,181	1,555,852	1,021,038	283	10,774	535,339	330,155	41,753	43,473	155,294
1888.	165,013	1,589,555	1,042,029	288	11,308	561,556	334,237	43,749	43,508	173,313
1889.	167,745	1,593,855	1,057,769	471	11,795	567,334	337,513	44,031	43,637	173,692
Years.	ESTIMATED AVERAGE PRODUCE PER STATUTE ACRE.									
	Cwts. 112 lbs.	Cwts. 112 lbs.	Cwts. 112 lbs.	Cwts. 112 lbs.	Cwts. 112 lbs.	Tons.	Tons.	Tons.	Tons.	Stones 14 lbs.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1880.	12·0	14·5	13·6	14·7	19·5	4·0	14·0	14·0	5·9	20·9
1881.	14·9	14·1	13·6	14·5	19·5	4·0	13·9	13·9	5·8	20·8
1882.	13·0	13·0	14·7	14·5	19·9	3·4	11·9	13·9	5·3	20·1
1883.	18·7	13·6	19·4	14·6	11·4	4·3	14·9	12·9	5·5	20·5
1884.	14·5	13·4	16·0	15·7	11·4	3·6	11·3	12·7	5·2	19·1
1885.	12·6	13·6	13·1	13·4	12·7	4·0	11·8	12·6	5·4	19·4
1886.	14·9	13·9	13·8	13·8	11·5	3·5	12·5	12·5	5·7	19·2
1887.	15·2	11·5	13·0	13·5	10·6	4·5	11·1	13·9	7·4	19·6
1888.	13·5	13·9	13·0	13·3	13·4	3·1	11·9	12·9	5·1	20·0
1889.	13·9	14·2	17·5	13·9	12·9	3·6	13·1	14·1	10·2	20·3
Years.	TOTAL PRODUCE.									
	Cwts. 112 lbs.	Cwts. 112 lbs.	Cwts. 112 lbs.	Cwts. 112 lbs.	Cwts. 112 lbs.	Tons.	Tons.	Tons.	Tons.	Tons.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1880.	2,022,717	18,558,479	3,444,442	5,255	73,209	2,388,835	4,359,080	604,421	863,535	23,222
1881.	2,220,121	18,219,076	3,335,014	6,589	79,048	2,433,283	3,918,940	604,792	275,508	26,522
1882.	2,075,469	18,595,495	2,759,014	8,232	84,635	2,894,264	2,262,341	480,078	342,032	26,232
1883.	1,996,713	18,631,231	2,921,537	4,242	82,334	2,457,460	4,763,717	825,736	340,877	18,232
1884.	2,011,214	18,108,445	2,673,789	4,738	79,416	2,816,452	2,507,794	436,677	365,890	18,472
1885.	1,697,198	18,193,877	2,688,917	4,222	106,632	2,776,738	2,851,763	490,720	237,786	20,372
1886.	1,697,335	18,370,813	2,772,860	4,104	122,722	2,677,704	3,374,423	505,586	360,344	23,373
1887.	2,011,035	18,169,413	2,971,487	4,216	118,313	2,869,601	2,719,121	451,331	295,129	18,306
1888.	2,357,339	17,630,338	2,761,383	4,943	107,622	2,923,707	3,399,681	500,555	365,545	20,306
1889.	1,636,193	17,639,813	3,202,022	6,139	108,435	2,647,328	2,969,822	601,630	421,026	18,265

PART III.—LIVE STOCK.

TABLE IX.—The Number and Ages of the Live Stock in Ireland, in 1888 and 1889, and the Increase or Decrease in each description:—

Description of Stock.		Number in 1888.	Number in 1889.	Increase in 1889.	Decrease in 1889.
HORSES,	{ Two years old and upwards, . . .	430,341	427,807	6,966	—
	{ One year old and under two, . . .	74,263	77,662	2,799	—
	{ Under one year, . . .	70,493	69,805	—	598
Total No. of Horses, . . .		565,097	574,264	9,167	—
MULES, ...		30,371	29,838	—	433
ASSES, ...		203,153	206,236	3,084	—
CATTLE,	{ Two years old and upwards, . . .	2,201,529	2,274,038	—	29,491
	{ One year old and under two, . . .	374,045	366,835	—	7,210
	{ Under one year, . . .	321,621	333,391	31,680	—
Total No. of Cattle, . . .		4,099,195	4,094,174	—	5,021
SHEEP,	{ One year old and upwards, . . .	2,151,116	2,232,846	91,730	—
	{ Under one year, . . .	1,468,553	1,336,341	70,788	—
Total No. of Sheep, . . .		3,619,669	3,769,187	149,518	—
PIGS,	{ One year old and upwards, . . .	171,061	168,645	—	2,465
	{ Under one year, . . .	1,236,734	1,312,031	—	14,710
Total No. of Pigs, . . .		1,397,825	1,380,370	—	17,150
GOATS, ...		206,878	308,933	8,255	—
POULTRY, ...		14,486,400	14,856,517	370,117	—

Number of
Live Stock.

At the period of the enumeration in 1889, the total number of horses in Ireland was 574,264, being an increase of 9,167 compared with 1888. There was an increase of 6,966 in the number "two years old and upwards," and of 2,799 in the "one year old, and under two," while there was a decrease of 598 in those "under one year."

Mules numbered 29,838, being 433 less than in 1888, and asses 206,236, being an increase of 3,084 as compared with the previous year.

Horses, Mules and Asses taken together numbered 768,457 in 1880, and 810,338 in 1889, being an increase of 41,881 or 5·5 per cent.

Cattle numbered 4,094,174 in 1889, showing a total decrease of 5,021 as compared with the number enumerated in 1888; in the "two years old and upwards" there was a decrease of 29,491, and in the "one year old and under two" a decrease of 7,210; while there was an increase of 31,680 in the number "under one year." Taking the ten years 1880 to 1889, cattle increased in number from 3,921,517 in 1880, to 4,228,851 in 1885, but decreased in each of the four following years, the number for 1889 being 4,094,174 as already stated.

Sheep amounted to 3,789,187 in 1889, showing an increase of 162,518, as compared with the previous year; the "one year old and upwards" increased by 91,730, and those "under one year" by 70,788.

Comparing 1880 with 1889 there has been an increase in the number of sheep from 3,562,463 in the former, to 3,789,187 in the latter year.

Pigs were returned as 1,380,670 in 1889, showing a decrease of 17,155, or 1·2 per cent. as compared with the previous year. The "one year old and upwards" decreased by 3,445, and those "under one year" by 14,710.

Comparing the number of pigs returned in the ten years from 1880 to 1889, the highest number, 1,430,128, was enumerated in 1882, and the lowest, 850,263, in 1880.

Goats numbered 303,933 in 1889, being 8,255 more than in 1888, and 38,144 more than in 1880.

The number of poultry in 1889 was 14,856,517, being 370,117 more than in 1888, and 1,426,335 more than in 1880. Of the 14,856,517 poultry in 1889, 985,456 were turkeys; 2,150,581 geese; 2,911,737 ducks; and 8,808,743 ordinary fowl.

Compared with 1888, turkeys increased by 59,402, geese by 38,224, ducks by 49,993, and ordinary fowl by 222,498.

TABLE X.—The Number of Live Stock in Ireland, in each year from 1880 to 1889, inclusive :—

Year.	Horses and Mules.	Asses.	Cattle.	Sheep.	Pigs.	Goats.	Poultry.
1880, . .	582,130	186,327	3,921,517	3,562,463	850,269	265,739	13,420,182
1881, . .	574,746	187,143	3,966,595	3,558,185	1,025,830	256,078	13,973,458
1882, . .	585,926	187,782	3,987,211	3,071,735	1,430,128	263,372	13,999,096
1883, . .	591,427	189,760	4,096,953	3,219,311	1,348,364	283,146	13,363,430
1884, . .	593,439	191,239	4,112,789	3,245,212	1,306,530	254,411	12,747,400
1885, . .	576,439	197,170	4,326,851	3,478,065	1,269,092	264,437	13,850,532
1886, . .	578,399	196,245	4,183,994	3,366,043	1,363,142	286,176	13,909,822
1887, . .	587,234	199,512	4,157,404	3,377,829	1,408,466	271,729	14,400,543
1888, . .	595,398	203,162	4,096,195	3,626,669	1,327,826	295,478	14,488,400
1889, . .	594,109	201,236	4,094,174	3,789,187	1,380,670	303,933	14,856,517

TABLE XI.—The proportion per cent. of Horses, Cattle, Sheep, and Pigs in Ireland, according to Age, for the years 1880 to 1889, inclusive :—

Years.	Horses.			Cattle.			Sheep.		Pigs.	
	Per-centages at each age.			Per-centages at each age.			Per-centages at each age.		Per-centages at each age.	
	Two Years old and upwards.	One Year old and under Two.	Under One Year.	Two Years old and upwards.	One Year old and under Two.	Under One Year.	One Year old and upwards.	Under One Year.	One Year old and upwards.	Under One Year.
1880.	78·2	12·1	9·7	57·7	30·9	21·4	84·4	35·6	13·6	86·4
1881.	79·2	11·4	9·4	57·9	19·9	22·2	84·5	35·5	15·7	84·3
1882.	79·6	10·4	10·0	57·0	19·9	23·1	83·0	37·0	15·2	84·8
1883.	79·2	10·8	10·3	55·3	20·6	24·9	61·7	38·3	13·4	86·6
1884.	78·0	11·1	10·9	55·3	21·5	23·2	62·5	37·5	12·6	87·4
1885.	76·5	11·6	11·6	58·0	20·8	21·2	61·5	38·5	12·7	87·3
1886.	76·3	12·3	11·4	56·7	21·0	22·3	61·7	38·3	12·7	87·3
1887.	76·8	12·5	11·7	56·7	20·8	22·5	60·8	39·8	12·7	87·3
1888.	74·4	13·1	12·5	66·2	21·3	22·5	59·6	40·4	12·2	87·8
1889.	74·4	12·4	12·2	65·5	21·2	22·3	59·6	40·5	12·2	87·8

MILCH COWS.

Milch Cows. TABLE XII.—The following statement shows the number of Milch Cows in Ireland in each year from 1854—the first year in which Milch Cows were separately enumerated—to 1889. The average number for the first five years of the period was 1,579,851, and for the last five years 1,395,751 being a decline of 184,100 or 11·7 per cent. The highest number in any one year was 1,690,389 in 1859, and the lowest 1,348,886 in 1864.

Years.	No. of Milch Cows.	Years.	No. of Milch Cows.	Years.	No. of Milch Cows.	Years.	No. of Milch Cows.
1854.	1,517,672	1863.	1,396,924	1872.	1,551,784	1881.	1,392,019
1855.	1,551,996	1864.	1,348,886	1873.	1,528,156	1882.	1,399,605
1856.	1,579,529	1865.	1,387,448	1874.	1,491,375	1883.	1,402,594
1857.	1,605,350	1866.	1,485,516	1875.	1,559,366	1884.	1,356,685
1858.	1,635,409	1867.	1,521,065	1876.	1,582,074	1885.	1,417,435
1859.	1,690,389	1868.	1,476,339	1877.	1,522,811	1886.	1,418,444
1860.	1,628,453	1869.	1,506,038	1878.	1,484,316	1887.	1,394,135
1861.	1,545,188	1870.	1,529,034	1879.	1,464,818	1888.	1,384,771
1862.	1,486,835	1871.	1,545,662	1880.	1,398,047	1889.	1,395,751

Tables showing the number of Live Stock in 1889, by counties and provinces will be found at page 46; by Poor Law Unions at pages 47-50; and by counties and provinces for each year from 1880 to 1889 at page 51.

EXPORTS AND IMPORTS OF LIVE STOCK.

Exports of Live Stock. With the view of giving a more accurate idea of the number of live stock produced in Ireland the following statement has been extracted from the Statistical Returns published in the Report for 1889 under the "Contagious Diseases (Animals) Act, 1878."

Number of Cattle, Sheep, and Swine, exported from Ireland to Great Britain during each of the fifteen years 1875-89:—

Years.	Cattle.					Sheep.					Swine.			Years.
	Cows, Bulls, and Cows.				Calves.	Total.	Sheep.	Lambs.	Total.	Fat Swine.	Store Swine.			
	Fat Cattle.	Store Cattle for fattening or breeding purposes.	Other Cattle.	Total.							Total.	Total.		
1875.	354,841	655,128	11,377	1,021,346	84,704	1,106,050	361,207	276,273	637,480	288,215	74,698	608,913	1875.	
1876.	475,254	598,523	56,798	1,130,575	93,867	1,224,442	474,471	311,252	785,723	410,844	77,929	518,773	1876.	
1877.	645,888	646,348	7,755	1,299,991	262,195	1,562,186	481,189	268,265	749,454	556,119	75,813	631,932	1877.	
1878.	545,344	616,759	6,894	1,168,997	312,884	1,481,881	559,755	468,758	1,028,513	421,137	55,365	476,502	1878.	
1879.	545,867	625,594	6,894	1,178,355	358,844	1,537,200	564,821	388,150	952,971	571,079	65,886	636,965	1879.	
1880.	595,838	637,558	5,618	1,239,014	364,471	1,603,485	551,558	714,794	1,266,352	552,165	55,217	607,382	1880.	
1881.	579,255	558,888	8,251	1,146,394	378,155	1,524,549	448,708	477,837	926,545	555,532	55,488	611,020	1881.	
1882.	581,777	657,758	8,208	1,247,743	393,852	1,641,595	552,844	558,583	1,111,427	609,466	65,465	674,931	1882.	
1883.	585,105	678,515	5,218	1,268,838	404,237	1,673,075	552,208	548,275	1,100,483	609,708	77,394	687,102	1883.	
1884.	585,552	657,385	5,205	1,248,142	715,245	2,063,387	555,488	577,513	1,133,001	607,262	15,461	622,723	1884.	
1885.	602,444	617,588	1,884	1,221,916	583,375	1,805,291	450,415	588,815	1,039,230	575,859	37,504	613,363	1885.	
1886.	585,158	655,515	1,342	1,241,915	454,061	1,695,976	560,510	561,118	1,121,628	552,708	35,778	588,486	1886.	
1887.	581,133	655,375	8,205	1,244,713	555,355	1,800,068	551,594	555,594	1,107,188	485,215	45,954	531,169	1887.	
1888.	595,557	658,280	2,645	1,256,482	758,716	2,015,198	608,038	592,765	1,200,803	485,530	55,455	540,985	1888.	
1889.	546,162	675,512	1,485	1,223,159	678,017	1,901,176	560,274	655,637	1,215,911	485,208	65,665	550,873	1889.	

From the foregoing it is evident that some of the younger animals included in the Statistics of Exports must of necessity escape enumeration in June of each year when

the returns of live stock are collected for this Department. Viewing the number of animals exported in relation to those enumerated it is found that in cattle the number exported bear a relation of 16·4 per cent. to those enumerated in 1889, as compared with 18·0 per cent. in 1888; in sheep 16·2 per cent. as compared with 17·6 per cent. in 1888; and in pigs 34·3 per cent. as compared with 39·0 per cent. in 1888.

From the same Report it appears that the number of horses exported in 1889 amounted to 31,824, equal to 5·5 per cent. of those enumerated.

It also appears that during the same period there were imported into Ireland, 2,996 horses, 468 cattle, 39,791 sheep, and 161 pigs.

Exports of Live Stock.

Imports of Live Stock.

HONEY PRODUCED IN 1888.

In connexion with the Agricultural Statistics for 1889, Returns were obtained of the amount of Honey produced in the year 1888, and of the number of swarms at work. Tables compiled from the information contained in these Returns are given in the Produce Report presented to Parliament in January of this year.

Honey produced in 1888.

SCUTCHING MILLS.

The number of Mills for scutching Flax in Ireland in 1889 was 1,062, being a decrease of 8 compared with 1888, and a decrease of 120 since the year 1880. 1,048 of these Mills in 1889 were in Ulster, 4 in Munster, 3 in Connaught, and 7 in Leinster. There were 447 Mills with from 1 to 4 stocks; 327 having 5 or 6; 253 with from 7 to 12; 33 having from 13 to 18, and 2 having above 18 stocks; 367 were worked by water power; 123 by steam; 71 by water and steam; and 1 by horse power.

Scutching Mills, 1889.

The following is the number of Scutching Mills, in each year, from 1880 to 1889 inclusive, by Provinces:—

Scutching Mills, 1880 to 1889.

Provinces.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Leinster, . .	8	9	7	8	9	7	7	7	8	7
Munster, . .	18	15	19	15	12	9	8	6	4	4
Ulster, . .	1,140	1,135	1,114	1,099	1,088	1,067	1,053	1,063	1,056	1,048
Connaught, . .	16	18	13	10	8	9	5	2	2	3
Ireland, . .	1,182	1,172	1,153	1,132	1,115	1,092	1,053	1,075	1,070	1,062

Scutching
Mills, 1859. Number of SCUTCHING MILLS in 1859, by COUNTIES and PROVINCES, classified according to the number of Stocks in each Mill, and the Power used in working them :—

PROVINCES AND COUNTIES IN WHICH THERE WERE SCUTCHING MILLS.	CLASSIFICATION OF MILLS.					Total No. of Mills.	POWER EMPLOYED.				
	Having 1, 2, or 4 Stocks.	Having 5 or 6 Stocks.	Having above 6 but not exceeding 12 Stocks.	Having above 12 but not exceeding 20 Stocks.	Having above 20 Stocks.		Water.	Steam.	Water and Steam.	Horse.	Wind.
LEINSTER :											
Longford, . . .	.	.	.	1	.	1	1	.	.	.	.
Louth & Drogheda, . .	.	.	4	.	.	4	2	2	.	.	.
Co. of Town, . . .	.	1	1	.	.	2	2	.	.	.	.
Total, . . .	.	1	5	1	.	7	5	2	.	.	.
MUNSTER :											
Cork, . . .	4	.	.	.	.	4	4	.	.	.	.
Total, . . .	4	.	.	.	.	4	4	.	.	.	.
ULSTER :											
Antrim, . . .	55	41	28	2	.	126	125	8	3	.	.
Armagh, . . .	13	34	39	5	2	93	70	17	5	1	.
Cavan, . . .	8	20	14	1	.	43	35	7	1	.	.
Donegal, . . .	150	25	12	.	.	187	148	3	6	.	.
Down, . . .	24	56	69	17	.	176	109	45	22	.	.
Fermanagh, . . .	8	9	6	2	.	25	22	2	1	.	.
Londonderry, . . .	96	58	19	.	.	173	158	5	10	.	.
Monaghan, . . .	24	24	23	2	.	73	56	12	6	.	.
Tyrone, . . .	65	48	36	3	.	172	133	21	18	.	.
Total, . . .	443	325	246	32	2	1,048	856	120	71	1	.
CONNAUGHT :											
Leitrim, . . .	.	.	1	.	.	1	1	.	.	.	.
Mayo, . . .	.	1	1	.	.	2	1	1	.	.	.
Total, . . .	.	1	2	.	.	3	2	1	.	.	.
TOTAL OF IRELAND,	447	327	253	33	2	1,059	857	123	71	1	.

SILOS AND ENSILAGE.

Following the course adopted in the two previous years, in view of the interest attaching to the question of Ensilage, I communicated with those Landed Proprietors and Landholders, throughout the country, having Silos or otherwise making Ensilage, requesting them to favour me with certain details regarding the methods followed and the results obtained in the year 1889. I received replies to 340 out of 444 circulars issued by me, and I beg to express my obligations to my correspondents for the valuable and interesting information afforded. It will be found set forth in the Appendix, pp. 70 to 123.

The following Table shows, by Counties and Provinces, the number of Silos or Stacks mentioned in the communications received from the persons who forwarded replies to the circular above referred to. A reference to the communications shows that the decline in the number for last year, as compared with that for 1888, is attributable to the fact that the weather of 1889 was much more favourable for hay-making:—

Counties.	Number in 1888.	Number in 1889.	Counties.	Number in 1888.	Number in 1889.
Antrim, ...	35	27	Mayo, ...	10	14
Armagh, ...	3	1	Meath, ...	74	63
Carlow, ...	11	5	Monaghan, ...	4	2
Cavan, ...	15	1	Queen's, ...	57	12
Clare, ...	14	9	Roscommon, ...	2	3
Cork, ...	49	24	Sligo, ...	2	2
Donegal, ...	6	13	Tipperary, ...	35	24
Down, ...	16	5	Tyross, ...	7	15
Dublin, ...	12	10	Waterford, ...	5	10
Fermanagh, ...	9	8	Westmeath, ...	19	4
Galway, ...	25	18	Wexford, ...	5	10
Kerry, ...	6	9	Wicklow, ...	16	10
Kildare, ...	9	14			
Kilkenny, ...	14	13	PROVINCES.		
King's, ...	35	22	Leinster, ...	240	175
Leitrim, ...	13	8	Munster, ...	120	91
Limerick, ...	12	15	Ulster, ...	120	93
Londonderry, ...	29	21	Connaught, ...	52	45
Longford, ...	5	6			
Louth, ...	3	6	TOTAL OF IRELAND,	532	404

In conclusion I have to thank the occupiers and owners of land in general for their courtesy in supplying the information required for the various Agricultural Returns to the Enumerators. I have also to express my thanks to the District Inspectors of the Royal Irish Constabulary and the Sergeants of the Metropolitan Police, who have furnished the valuable notes on the local circumstances affecting agriculture in the various parts of the country, which will be found at pages 60 to 69; and to add, as I do, with much pleasure, that the Enumerators discharged their duty with their usual efficiency.

I have the honour to remain,

Your Excellency's faithful servant,

T. W. GRIMSHAW,

Registrar-General.

General Register Office,

Charlemont House, Dublin,

19th May, 1890.

TABLE 3.—Sheaving, by Post Law Customs, the NUMBER of HOLIDAYS, their SEAS in SEVERAL AREAS, and the DIVISION of LAND in the YEAR 1889.

POST LAW (1900-1901)	Months of Harvest and other SEAS in SEVERAL AREAS.										Total Number of Holidays.	FESTIVALS.							TOTAL.	
	Not sheaving.											FESTIVALS.								
	Area.	-15.	-25.	-35.	-45.	-55.	-65.	-75.	-85.	-95.		-105.	Days, Months, Years.	Days, Months, Years.	Days, Months, Years.	Days, Months, Years.	Days, Months, Years.	Days, Months, Years.		
Alford,	405	331	545	555	409	389	293	32	0	5,369	40,857	40,857	40,857	40,857	40,857	40,857	40,857	127,005		
Arden,	475	259	339	1,005	374	135	145	12	0	3,767	24,429	24,429	24,429	24,429	24,429	24,429	24,429	127,177		
Arden,	324	271	371	419	374	222	14	12	0	3,767	24,429	24,429	24,429	24,429	24,429	24,429	24,429	127,177		
Arden,	789	1,060	1,569	2,150	700	333	30	37	0	8,532	77,027	77,027	77,027	77,027	77,027	77,027	77,027	184,873		
Arden,	300	600	1,569	1,569	409	300	125	0	14	4,774	30,825	30,825	30,825	30,825	30,825	30,825	30,825	120,848		
Arden,	501	370	797	564	409	411	268	131	10	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	124	226	1,389	1,005	374	135	22	3	1	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	622	291	1,569	1,199	712	100	130	69	10	4,070	29,766	29,766	29,766	29,766	29,766	29,766	29,766	120,848		
Arden,	155	484	984	984	712	264	43	104	30	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	276	465	1,740	1,005	374	264	131	62	12	4,070	29,766	29,766	29,766	29,766	29,766	29,766	29,766	120,848		
Arden,	122	135	405	405	409	309	99	56	14	3,170	20,959	20,959	20,959	20,959	20,959	20,959	20,959	120,848		
Arden,	947	317	477	712	411	579	160	46	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	225	562	1,005	1,005	411	469	183	40	3	4,192	29,766	29,766	29,766	29,766	29,766	29,766	29,766	120,848		
Arden,	226	569	1,100	1,005	411	469	183	40	3	4,192	29,766	29,766	29,766	29,766	29,766	29,766	29,766	120,848		
Arden,	378	521	1,005	1,005	409	374	97	31	4	4,192	29,766	29,766	29,766	29,766	29,766	29,766	29,766	120,848		
Arden,	165	302	707	1,005	1	348	105	30	18	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	465	434	514	984	105	291	157	65	4	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	141	384	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	147	774	2,840	1,820	700	348	261	38	1	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	141	384	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	43	30	520	514	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	141	384	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340	21,340	21,340	21,340	21,340	120,848		
Arden,	415	371	1,005	1,005	374	264	131	71	3	3,192	21,340	21,340	21,340							

TABLE 3.—Showing, by FOUR LAND UNIONS, the NUMBER of HOUSEHOLDS, their SIZE in STATUTE ACRES, and the DIVISION of LAND in the Year 1889.—continued.

FOUR LAND UNIONS.	NUMBER of HOUSEHOLDS and THEIR SIZE in STATUTE ACRES.								Total Persons in each Union.	Extent of LAND.									
	Not exceeding									Crops, including Number and Acres.	Grass.	Fallow.	Woods and Plantations.	Estates and Manors.	Barns and Pastures.	Water, Rivers, &c.	Total.		
	Less than 1/2.	1/2.	1.	2.	3.	4.	5.	6.											
Gloucester.	480	425	1,340	1,390	575	373	166	43	7	4,520	26,027	71,368	15	1,730	17,226	44,001	6,316	174,000	
Leicester.	143	502	2,000	1,804	807	227	51	12	34	4,435	24,702	46,784	240	800	27,741	47,001	6,957	100,411	
Derbyshire.	180	280	710	917	448	225	48	11	2	2,754	22,553	45,314	2	1,730	17,226	44,001	6,316	100,411	
Nottingham.	407	148	250	391	599	792	201	109	3	5,040	42,596	104,203	16	1,730	17,226	44,001	6,316	100,411	
Lincoln.	385	256	648	536	383	283	126	117	15	3,697	22,520	79,265	37	1,730	17,226	44,001	6,316	100,411	
Warwick.	50	54	200	300	300	324	219	111	39	9,167	14,199	59,645	120	2,445	21,222	64,165	7,244	199,100	
Bedford.	907	731	1,321	600	173	39	29	39	39	3,494	30,181	31,200	6	2,220	2,822	62,700	1,000	110,000	
Hampshire.	448	377	433	600	600	307	109	48	8	2,218	37,263	54,222	231	1,444	6,608	7,200	2,500	110,000	
Wiltshire.	34	72	217	434	600	307	40	37	3	1,594	15,007	39,444	2	310	4,708	5,400	2,500	67,000	
Salisbury.	41	108	308	431	152	145	60	50	30	5,476	1,564	60,800	7	215	37,073	70,000	2,500	144,000	
Wiltshire.	228	802	1,086	694	345	300	316	115	23	4,174	20,000	19,449	217	6,000	34,732	73,000	1,170	241,000	
Devonshire.	150	102	110	32	111	513	130	50	4	361	5,538	37,260	40	1,810	6,600	7,200	2,500	110,000	
Gloucester.	387	216	460	700	617	614	226	33	5	3,177	27,145	35,000	10	1,900	1,431	6,000	2,700	145,000	
Wiltshire.	217	308	728	1,090	396	340	120	26	1	5,996	31,670	73,236	10	470	15,800	4,900	3,000	180,000	
Lincoln.	84	98	348	596	296	262	146	36	3	1,428	25,790	44,190	22	1,810	4,604	5,122	4,325	70,000	
Leicester.	374	250	719	100	576	100	108	33	14	5,263	35,300	38,307	1	1,620	2,840	14,000	4,100	117,000	
Derbyshire.	121	517	319	472	407	322	107	47	11	2,221	33,070	44,809	201	3,000	5,644	10,000	4,900	117,000	
Nottingham.	703	164	724	100	362	420	140	37	13	4,168	40,700	54,210	2	1,810	16,200	25,000	7,900	132,000	
Lincoln.	426	394	854	100	777	144	203	30	0	4,900	18,000	108,200	34	3,246	4,905	7,071	7,700	177,000	
Warwick.	386	494	1,700	1,611	807	379	24	14	1	3,170	90,201	60,201	41	3,212	360	484	7,001	130,000	
Warwick.	482	180	317	455	907	514	126	30	7	3,170	19,140	45,300	56	5,745	3,700	22,000	4,300	117,000	
Derbyshire.	235	264	800	1,130	670	260	80	6	0	5,117	27,074	82,770	3	2,310	4,000	6,600	1,100	107,000	
Lincoln.	228	448	600	805	611	646	226	72	6	3,264	37,430	10,600	3	804	17,400	8,000	6,000	141,000	
Derbyshire.	437	185	313	802	489	400	260	41	8	5,528	35,000	50,000	39	1,400	9,400	23,000	6,600	145,000	
Longford.	384	670	1,200	1,500	489	211	90	34	3	3,060	25,340	32,000	39	1,900	19,400	500	6,316	100,000	
Longford.	301	487	1,117	1,300	484	40	267	100	81	4,096	20,800	111,400	47	4,000	37,000	61,000	4,201	180,000	
Longford.	190	1,164	1,244	1,411	440	155	47	0	0	5,104	43,000	27,400	43	520	5,000	20	4,100	70,000	
Longford.	417	680	1,200	1,300	441	340	300	90	0	3,482	30,000	32,770	2	2,001	19,771	25,000	4,700	170,000	
Malina.	327	161	240	430	870	440	360	60	10	7,473	40,311	69,000	80	1,700	11,000	30,000	2,500	100,000	
Malina.	300	361	1,400	1,700	220	240	74	37	4	4,770	55,384	77,000	92	1,796	3,700	35,000	5,200	144,000	
Malina.	313	217	300	570	390	220	220	24	4	5,000	35,225	42,412	35	3,111	3,000	4,400	4,700	100,000	
Malina.	79	82	111	100	418	270	48	12	4	3,314	20,000	21,904	3	1,000	9,000	12,000	2,500	11,000	
Malina.	244	147	890	670	407	271	60	13	7	9,800	18,000	40,704	44	1,000	941	11,200	3,100	50,000	
Malina.	240	250	1,000	1,475	907	320	40	8	1	6,160	24,817	31,760	129	941	7,240	240	7,000	60,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	79	440	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	11	1,600	2,700	9,700	7,000	110,000	
Malina.	300	680	274	1,600	800	300	100	7	1	9,307	50,613	47,380	1						

TABLE 5.—SHOWING, BY COUNTIES AND PROVINCES, THE EXTENT OF LAND

COUNTIES.	CEREALS, GRASSES, AND FRUIT.								SEEDY OTHER CROPS		
	Wheat.	Oats.	Barley.	Bees.	Rye.	Maize.	Peas.	Turnips.	Potatoes.	Turnips.	Grass and other crops.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
ANTRIM, ...	9,684	73,641	890	22	34	1,362	62	74,680	45,372	18,933	220
ARMAGH, ...	3,600	43,727	43	21	156	129	13	54,741	22,374	8,628	155
CARLOW, ...	1,763	15,245	1,001	1	.	.	.	26,002	5,549	4,845	540
CAYMAN, ...	209	20,404	35	19	125	6	4	25,740	27,843	2,801	460
CLARE, ...	3,740	10,768	890	4	1,483	33	2	18,722	22,320	5,607	2,215
COKE, ...	12,122	66,603	18,540	8	258	13	7	125,298	61,064	26,684	8,363
DEVONSHIRE, ...	693	67,405	1,734	26	1,816	269	285	80,419	44,215	17,618	817
DOW, ...	12,750	102,540	534	13	67	862	88	156,736	47,736	18,900	965
DUBLIN, ...	4,202	13,548	2,076	8	74	3	00	20,079	8,699	2,808	436
FERRISBURGH, ...	880	10,530	36	25	467	20	13	21,137	15,735	2,800	765
GALWAY, ...	6,065	43,573	3,002	41	3,707	4	166	66,649	43,261	13,498	2,303
KERRY, ...	2,131	54,434	2,343	21	665	14	.	29,312	28,177	5,205	1,870
KILMURRAY, ...	3,612	22,835	15,454	20	389	3	3	37,718	3,179	11,234	1,206
KILMURRAY, ...	6,519	61,468	17,280	.	8	.	.	55,784	35,096	9,634	1,471
KING'S, ...	848	20,373	16,426	25	735	2	4	60,929	18,467	10,120	1,716
LEITH, ...	79	11,682	8	4	803	1	.	22,029	16,064	1,008	256
LOTHIAN, ...	4,780	17,671	1,239	2	71	7	1	24,741	20,033	8,114	1,719
LOTHIAN, ...	1,272	76,906	1,200	81	614	193	14	74,314	31,763	14,436	271
LOTHIAN, ...	390	13,429	13	8	248	.	.	14,779	10,079	2,307	418
LOTHIAN and DUNDEE, County of Down.	1,131	25,468	15,155	5	18	55	18	30,546	11,543	3,977	638
MAYO, ...	1,829	49,479	1,164	48	3,117	2	46	55,057	48,097	8,977	764
MAYO, ...	1,181	26,428	1,000	8	192	2	.	27,622	11,190	8,896	801
MIDLESEX, ...	788	40,346	787	3	96	89	2	50,806	22,028	5,412	858
QUEEN'S, ...	646	16,728	22,415	26	28	3	1	42,548	18,503	11,808	1,344
ROBINSON, ...	402	23,113	967	18	1,404	10	.	25,964	26,067	4,696	737
SLIGO, ...	764	26,369	386	3	643	4	2	29,199	30,362	3,192	632
TIPPERARY, ...	8,625	42,761	20,890	46	95	7	3	71,802	31,068	12,455	2,030
TYNNE, ...	1,466	56,200	80	2	341	21	6	26,108	41,201	13,798	476
WATERFORD, ...	1,963	26,184	1,345	4	75	.	.	31,733	14,040	3,009	1,181
WATERFORD, ...	48	17,087	400	3	156	8	2	21,554	10,723	5,004	1,194
WEXFORD, ...	4,301	49,179	24,698	37	26	1,287	5	66,336	22,480	10,551	2,881
WICKLOW, ...	1,391	25,646	612	1	.	.	.	25,506	20,073	4,234	766
PROVINCES.											
LEINSTER, ...	24,894	278,647	122,027	128	1,918	1,367	119	448,949	181,068	85,187	14,561
MUNSTER, ...	32,755	258,015	43,180	62	2,027	80	13	364,354	169,028	70,078	12,040
ULSTER, ...	22,021	186,545	5,200	123	3,263	2,344	384	621,220	262,029	121,095	5,462
CONNAUGHT, ...	9,253	148,714	3,682	107	2,030	26	153	172,880	109,061	29,460	4,962
TOTAL, ...	66,923	1,280,921	184,789	421	15,736	3,628	655	1,623,693	767,284	337,813	44,851

THESE COUNTS IN THE YEAR 1889, THE VALUATION IN 1889, AND THE POPULATION IN 1881.

IN STATUTE ACRES.

GRASS COUNTS.							EXTRACT FOR RAY GRASS.			TOTAL STATUTE ACRES.	Valuation in £.	Population in 1881.	COUNTRY.
County and Parish.	English.	Welsh.	Scots.	Other Grass Crops.	Straw.	Flax.	Other, &c., not valued as Grass.	Permanent Pasture not valued as Grass.					
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	£			
10	290	280	10	548	55,280	18,450	51,940	40,180	260,960	1,248,581	401,843	AMSTER.	
17	200	220	10	1,640	38,581	5,560	33,487	22,008	187,384	438,997	353,177	ARLASH.	
121	650	8	20	410	16,440	.	14,580	18,517	77,190	154,817	40,800	CARLOW.	
81	1,180	65	78	1,280	24,215	5,760	17,450	25,411	283,448	274,326	326,478	CAYAN.	
366	1,812	20	25	580	84,278	10	8,180	52,808	144,961	817,348	241,487	CLARE.	
480	4,080	1,204	200	2,685	105,870	85	54,870	128,311	412,642	1,254,555	401,607	COCK.	
123	5,380	600	65	1,347	67,370	10,610	24,142	44,780	237,894	595,992	284,835	DEVON.	
127	380	610	84	2,418	72,592	59,915	71,600	11,073	208,758	848,503	272,387	DOWA.	
218	899	47	20	2,678	18,374	.	10,574	83,886	82,870	1,478,443	418,810	DUBLIN.	
32	213	60	75	833	20,512	2,745	8,194	37,080	109,801	202,418	84,870	FERRISBUR.	
70	1,080	171	2,000	1,551	64,181	8	22,186	74,674	283,696	474,674	242,068	GALWAY.	
58	4,078	40	200	788	48,882	10	4,803	80,808	160,403	280,180	201,030	KERRY.	
80	277	48	265	461	26,280	.	18,831	36,428	117,678	339,780	75,864	KILGAR.	
65	1,287	70	24	408	20,235	1	22,868	43,878	182,580	518,488	80,821	KILKERRY.	
84	588	80	784	674	28,780	1	12,808	52,808	120,178	548,714	22,802	KIRK.	
59	1,580	21	90	820	23,815	82	1,872	45,872	81,601	138,448	66,278	LEITH.	
107	2,020	45	80	851	30,748	1	7,765	167,875	171,170	481,321	180,832	LEITH.	
30	878	314	70	1,488	60,290	10,148	22,104	11,118	180,877	684,377	164,880	LEITH.	
36	484	60	87	804	15,248	49	4,868	60,114	60,187	184,208	61,868	LEITH.	
67	408	140	9	608	20,440	120	17,804	8,974	80,818	583,254	77,884	LEITH & DROGHEDA, County of Down.	
90	2,021	180	408	1,441	81,274	120	11,210	46,825	180,820	814,280	242,510	LEITH.	
82	380	40	120	901	18,880	85	15,430	60,690	220,840	407,635	81,480	LEITH.	
37	415	120	68	1,520	64,875	12,530	28,230	12,800	140,830	568,877	103,740	LEITH.	
103	718	78	184	822	20,480	.	18,300	40,604	138,832	288,888	78,124	LEITH.	
18	1,777	26	746	688	33,080	1	4,820	60,678	120,718	280,872	103,884	LEITH.	
37	1,204	20	48	800	20,280	20	2,301	81,628	81,111	518,758	111,878	LEITH.	
226	8,320	100	266	758	50,807	.	54,378	81,884	288,438	600,227	100,812	LEITH.	
33	680	120	58	2,025	61,888	12,810	18,808	22,102	281,398	480,184	103,718	LEITH.	
727	1,802	36	9	890	24,907	.	12,873	11,301	80,440	817,322	112,568	LEITH.	
52	780	90	206	758	18,756	.	8,889	44,808	20,444	508,587	71,758	LEITH.	
180	1,908	80	90	672	46,880	1	20,410	26,647	260,880	378,847	103,884	LEITH.	
84	570	86	48	686	37,882	.	16,081	43,801	100,880	278,947	70,884	LEITH.	
PROVINCES.													
1,080	18,110	717	1,781	8,607	204,822	848	204,180	457,001	1,367,420	4,744,584	1,570,888	LEITH.	
1,184	17,001	1,678	884	8,377	237,800	116	104,030	417,636	1,360,476	3,871,740	1,381,116	LEITH.	
471	7,880	2,964	488	12,896	438,378	12,880	208,284	230,781	1,772,698	4,617,814	1,742,870	LEITH.	
137	7,864	487	3,840	4,356	563,568	595	80,808	103,773	671,458	1,484,580	811,887	LEITH.	
2,000	45,487	6,004	7,024	20,800	1,203,748	115,802	670,242	1,517,008	5,000,018	13,880,007	4,374,838	TOTAL.	

*The slight difference between the Total Valuation by Counties and that by Values is accounted for by the fact that the County and Urban Ratings do not take effect at the same period of the year.

TABLE C.—SHOWING, BY COUNTIES AND PROVINCES THE

COUNTIES.	PRODUCE OF						
	CORN, OATS, AND PEAS.						
	Wheat.	Oats.	Barley.	Peas.	Apples.	Turnips.	Peas.
	Acres of 117 lbs.	Acres of 117 lbs.	Acres of 117 lbs.	Acres of 117 lbs.	Acres of 117 lbs.	Acres of 117 lbs.	Acres of 117 lbs.
ANTRIM, ...	26,523	1,575,382	15,233	185	535	25,534	515
ARMAGH, ...	26,350	615,595	555	155	2,880	2,564	185
CARLOW, ...	26,571	202,081	25,561	11	-	-	-
CAYAH, ...	5,473	426,630	1,567	147	2,550	85	84
CLARE, ...	28,823	293,533	11,567	51	17,575	566	54
CORK, ...	284,229	1,565,572	265,173	130	2,615	225	50
DOWGLASS, ...	5,562	1,156,433	25,654	256	15,575	5,512	1,565
DUBLIN, ...	155,743	1,565,412	5,515	525	757	7,565	855
DUNDALK, ...	26,563	257,564	55,154	55	547	65	1,515
FERRARD, ...	15,725	225,517	45	215	5,535	255	155
GALWAY, ...	57,650	647,750	55,755	515	25,515	75	555
KERRY, ...	24,555	545,655	25,555	255	7,515	255	-
KILDARE, ...	24,555	545,515	25,515	415	5,514	155	25
KILKENNY, ...	155,515	455,545	557,755	-	125	-	-
KILPATRICK, ...	7,552	525,571	555,522	251	12,755	57	54
LEITH, ...	1,555	155,425	54	45	4,555	14	-
LOUGH, ...	26,555	255,557	15,755	32	575	155	25
LOUGHREARY, ...	15,545	1,554,425	25,125	275	5,555	5,557	255
LONGFORD, ...	5,154	255,535	251	52	4,555	-	-
LOUGH AND DROGHEDA, County of Town.	25,575	545,571	255,555	55	155	755	455
MAYO, ...	25,555	711,722	15,455	454	45,455	54	545
MELROSE, ...	21,555	515,155	25,557	75	5,575	154	-
MONTAGHAN, ...	15,555	455,755	11,555	125	554	254	22
QUINN, ...	15,555	545,115	415,455	155	255	52	25
ROBINSON, ...	5,555	255,435	4,555	155	15,155	155	-
SLIGO, ...	15,554	517,655	5,575	25	5,525	45	25
THURLEIGH, ...	155,555	655,155	255,745	157	1,455	155	55
TYNAR, ...	21,555	1,575,155	555	55	5,535	252	75
WATERFORD, ...	55,251	471,555	25,255	45	455	-	-
WATERFORD, ...	555	255,255	5,555	77	2,574	55	54
WATERFORD, ...	51,554	715,725	554,575	444	154	25,515	55
WICKLOW, ...	17,575	515,554	5,555	25	-	-	-
PROVINCES.							
LEITH, ...	455,555	4,515,435	2,555,555	1,754	25,555	25,555	1,554
MELROSE, ...	255,555	5,555,557	745,555	1,555	25,574	1,577	515
TYNAR, ...	255,554	7,551,555	57,555	1,555	25,555	41,577	4,515
CONNAUGHT, ...	241,155	5,155,514	55,155	1,555	25,725	577	1,554
TOTAL, ...	1,455,155	17,555,555	3,547,555	6,125	255,435	47,575	5,125

PRODUCE OF THE CROPS IN THE YEAR 1889.

THE CROPS.

Grain Crops.							Hay.			COUNTIES.
Barley.	Oats.	Straw of Wheat and Barley.	Grass and Potatoes.	Cabbages.	Turnips.	Rams.	Hay.	Straw of Hay.	Straw of Potatoes.	
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
105,115	125,312	3,118	507	7,800	10,727	100	306,570	100,550	127,142	ASTORIA.
67,705	61,704	6,755	354	2,438	8,215	927	290,020	73,550	61,165	ANDERSON.
45,336	71,123	9,808	1,015	8,822	100	459	-	30,719	37,519	CARLOW.
50,839	45,553	8,048	590	11,006	357	800	160,189	42,562	145,722	CAYAN.
79,480	95,250	55,426	545	20,781	158	958	300	10,583	105,918	CLARE.
256,829	292,499	122,127	4,739	20,768	26,129	2,419	8,411	110,671	360,108	CORR.
165,430	200,120	12,297	537	30,109	5,684	833	224,462	50,538	55,272	DONOGAL.
157,182	219,672	10,860	890	8,877	6,620	728	480,716	139,676	50,856	DOWR.
40,824	51,602	13,785	1,437	21,281	367	144	-	25,893	60,139	DUNELM.
40,339	50,000	18,813	658	9,584	568	52	28,743	14,700	128,368	FERRISBURGH.
161,561	173,473	34,380	685	10,582	1,207	17,580	132	27,358	105,491	GALWAY.
165,543	60,009	24,585	717	23,016	333	2,212	599	16,875	180,625	KERRY.
55,582	107,403	12,437	682	3,729	363	1,809	-	28,565	73,719	KILBARR.
45,028	391,008	20,214	665	25,403	494	147	80	20,830	85,238	KILKEEN.
85,027	140,157	27,583	293	6,382	626	3,322	26	20,242	81,720	KING'S.
55,639	13,971	4,671	189	14,691	122	276	1,243	5,217	139,768	LEITRIM.
84,693	84,139	26,347	1,565	21,231	389	290	32	18,125	237,438	LIMERICK.
121,248	209,670	8,282	683	10,599	4,453	625	896,884	65,651	34,096	LONGFORD.
80,129	50,544	8,464	217	5,783	546	518	1,645	16,884	70,565	LONGFORD.
45,449	51,225	6,584	567	1,789	927	12	18,673	49,200	17,623	LOUTH and DOWN, County of Down.
160,796	112,464	10,478	265	20,341	1,654	4,391	2,051	27,715	54,023	MAYO.
34,891	55,003	18,938	768	4,513	248	693	1,761	31,104	130,960	MEATH.
87,088	66,507	11,036	226	3,821	1,669	693	274,480	64,651	54,545	MONAGHAN.
98,812	171,624	25,567	1,564	8,141	783	1,309	-	42,825	22,585	QUEEN'S.
69,395	48,438	10,441	216	13,622	371	4,516	28	10,892	154,287	ROSCOMMON.
74,547	61,543	10,711	416	13,179	223	368	718	27,530	77,593	SLEIGH.
118,568	212,743	27,567	2,545	20,183	722	1,724	-	76,608	290,040	TIPPERARY.
120,694	236,342	6,972	172	7,444	1,819	285	241,666	50,948	85,595	TREAS.
31,696	78,145	26,599	1,025	16,565	598	27	-	58,648	25,618	WATERFORD.
26,255	78,906	16,120	429	8,845	139	2,473	-	16,473	92,438	WEXFORD.
84,759	106,425	27,856	1,362	18,668	424	235	80	105,634	40,552	WICKLOW.
84,963	73,768	12,225	893	8,754	207	580	-	56,634	84,247	WICKLOW.
										PROVINCES.
252,148	1,271,830	268,236	8,589	106,554	8,176	17,516	11,776	465,607	684,025	LEINSTER.
673,694	818,554	215,632	11,348	155,274	21,855	4,912	4,541	274,529	1,110,514	MUNSTER.
1,061,410	1,114,374	71,274	4,726	25,267	33,654	4,948	3,899,089	582,427	741,246	CONNAUGHT.
242,436	499,065	79,275	1,518	66,008	5,418	26,772	5,603	87,728	659,550	ULSTER.
5,047,629	5,968,622	621,638	26,516	411,925	66,285	25,017	1,298,431	1,478,544	2,275,687	TOTAL.

TABLE 7.—SHOWING BY POOR LAW UNIONS, THE EXTENT OF LAND

POOR LAW UNIONS.	EXTENT UNDER CULT.											
	CORN, GRASS, AND PASTURE.											
	Wheat.	Oats.	Barley.	Roots.	Hay.	Straw.	Peas.	Total.	Arable.	Permanent.	Wood.	Other.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
ABINGDON, ...	145	8,611	7,120	3	2			15,281	5,675	3,704	418	
ABINGDON, ...	301	15,150	20	3	3	149	20	15,313	7,139	1,911	31	
ABINGDON, ...	410	8,314	4,204	5	30	40	38	13,141	5,154	2,379	27	
ABINGDON, ...	1,495	20,851	10	7	70	120	11	21,144	10,563	4,022	54	
ABINGDON, ...	78	4,320	40	1	541			5,092	4,304	1,630	501	
ADDINGTON, ...	390	11,320	14,257	8	51	1		25,971	4,559	7,791	90	
ADDINGTON, ...	14	7,772			9			7,795	4,683	2,91	60	
ADDINGTON, ...	118	7,059	184	12	362	2	48	7,774	5,372	1,430	169	
ADDINGTON, ...	65	4,979	204	8	117			5,313	3,365	1,729	169	
ADDINGTON, ...	1,443	2,289	109	12	583	1		7,184	2,292	1,261	91	
ADDINGTON, ...	16	5,518	515	2	1	356	2	6,393	4,153	1,645	9	
ADDINGTON, ...	107	4,071			23			4,221	3,064	1,60	526	
ADDINGTON, ...	84	14,527	1	1	10			14,539	11,548	1,095	31	
ADDINGTON, ...	91	11,051			2	7		11,061	9,984	2,545	30	
ADDINGTON, ...	184	2,000	4		167	30		4,203	3,095	404	184	
ADDINGTON, ...	203	917	341		13	18		789	612	943	145	
ADDINGTON, ...	1,421	3,108	1,571	8	47		10	3,207	3,507	1,170	274	
ADDINGTON, ...	171	7,108	536		9			7,829	4,511	1,790	209	
ADDINGTON, ...	407	22,002	28		10	18		22,058	9,545	3,594	81	
ADDINGTON, ...	652	7,228	753	2	9		1	2,203	3,794	2,908	703	
ADDINGTON, ...	602	1,709	4	1	26			2,455	2,489	389	194	
ADDINGTON, ...	54	4,203	3		56			4,447	4,443	227	43	
ADDINGTON, ...	218	3,338	8	8	1	8		3,787	1,712	1,101	40	
ADDINGTON, ...	230	2,813	508	2	810			3,321	2,007	909	13	
ADDINGTON, ...	301	3,009	6,250		22		2	10,464	2,944	3,350	203	
ADDINGTON, ...	248	5,160	48		174		1	5,490	7,753	788	261	
ADDINGTON, ...	6	3,338		2	21			3,364	4,225	903	284	
ADDINGTON, ...	2,070	3,409	1,235					4,811	2,771	1,380	137	
ADDINGTON, ...	1,185	13,832	4,810					20,410	7,199	3,513	814	
ADDINGTON, ...	416	10,014	602	1	8			11,026	4,231	2,046	74	
ADDINGTON, ...	59	3,393	2	1	200	1		3,326	3,350	260	198	
ADDINGTON, ...	708	2,032	58					9,461	4,129	1,263	406	
ADDINGTON, ...	1,264	7,542	1,648		2	8		11,351	4,523	3,018	407	
ADDINGTON, ...	481	6,100	1,65	6	120			6,500	4,650	1,600	10	
ADDINGTON, ...	2	17,234	2					17,236	7,000	2,880	336	
ADDINGTON, ...	148	2,330	1,935		4			3,274	3,790	794	128	
ADDINGTON, ...	58	7,714			23			7,739	8,204	1,144	4	
ADDINGTON, ...	9	8,725	95	7	267	9		9,306	8,536	1,200	148	
ADDINGTON, ...	12	1,530	1		14			1,546	1,540	221	49	
ADDINGTON, ...	273	12,745	28	8	174	6	4	13,194	16,436	824	228	
ADDINGTON, ...	821	4,889	980	8			28	5,701	1,118	1,172	208	
ADDINGTON, ...	47	8,350	32		324			8,697	4,715	1,480	10	
ADDINGTON, ...	12	1,990	220	6	808			2,026	3,379	191	116	
ADDINGTON, ...	3,777	6,434	36		8			9,223	4,440	1,273	193	
ADDINGTON, ...	351	11,907	8		18	2	8	11,284	4,515	1,770	88	
ADDINGTON, ...	1,225	2,778	1,890		59			7,090	4,994	2,038	404	
ADDINGTON, ...	412	5,578	6	8	160	2		6,160	3,310	763	263	
ADDINGTON, ...	1,264	8,716	89		1			9,800	2,354	790	103	
ADDINGTON, ...	38	10,090	867		14	41	17	10,469	1,269	2,046	137	
ADDINGTON, ...	732	12,003	24	9	119	8	3	13,950	6,970	2,961	143	
ADDINGTON, ...	70	13,749	29	8	57		1	13,913	5,975	1,323	80	
ADDINGTON, ...	400	15,734	2,582		8		8	16,621	5,199	4,481	1,748	
ADDINGTON, ...	451	7,409	46		27			7,492	1,095	443	184	
ADDINGTON, ...	1,308	2,622	261		1			4,272	5,022	730	252	
ADDINGTON, ...	19	3,126	2		17			3,153	1,022	1,067	219	
ADDINGTON, ...	9	3,182	49	5	294	1		3,529	3,564	620	120	
ADDINGTON, ...	86	4,624	14	1	102	30		4,827	4,760	420	40	
ADDINGTON, ...	6,040	27,341	44	1	37	37	21	34,427	15,130	3,843	383	
ADDINGTON, ...	482	6,290	3,391		11			11,991	5,046	2,517	281	
ADDINGTON, ...	245	4,459	480		63			5,454	3,026	1,030	10	
ADDINGTON, ...	1,024	2,008	741		1	8	60	4,061	2,860	860	165	
ADDINGTON, ...	608	2,376	10		1		2	3,064	1,267	371	103	
ADDINGTON, ...	524	18,117	8,517		4	7		20,189	3,300	4,469	289	
ADDINGTON, ...	18	4,493	167	4	290		2	5,003	3,412	520	8	
ADDINGTON, ...	885	16,338	2	9	65	1		16,791	8,671	2,552	123	
ADDINGTON, ...	455	8,546	890		8			9,489	3,778	1,596	212	
ADDINGTON, ...	855	8,479	15	6	30	2		9,367	3,301	1,248	149	
ADDINGTON, ...	194	2,771	17		4			2,896	1,040	612	77	
ADDINGTON, ...	347	6,309	2,137	14	331	6		9,139	3,419	2,164	401	
ADDINGTON, ...	464	2,461	48		109	15		3,136	2,802	1,940	481	
ADDINGTON, ...	1,964	10,387	11,225		1		7	31,294	5,881	4,128	373	
ADDINGTON, ...	154	7,738	18		145	6	8	8,164	6,962	1,218	314	
ADDINGTON, ...	187	7,622	84		220	1		8,103	8,214	607	285	
ADDINGTON, ...	950	18,148	279	1	14	2		14,863	5,025	3,522	330	
ADDINGTON, ...	1,560	3,340	1,149	8	845	2	79	9,679	6,665	1,278	308	
ADDINGTON, ...	2	4,230	9		280			4,267	4,452	1,094	80	
ADDINGTON, ...		7,623	821		801			7,845	5,561	304	148	
ADDINGTON, ...	410	1,694	26	1	8			1,843	1,701	407	148	
ADDINGTON, ...	1,306	10,833	2,068	4		67	8	14,141	2,971	2,568	450	
ADDINGTON, ...	1,481	2,862	1,801	2	77	2	18	8,463	3,817	1,454	322	

STEAK COOPS IN THE YEAR 1880, THE VALUATION IN 1880, AND THE POPULATION IN 1881.

[illegible]

TABLE 7.—SHOWING, BY FOOD LAW UNIONS, THE EXTENT OF LAND

FOOD LAW UNIONS.	EXTENT UNDER CROPS											
	CEREALS, FRUIT, AND VEGETABLES.											
	Wheat.	Oats.	Barley.	Rye.	Rye.	Maize.	Potatoes.	Peas.	Beans.	Turnips.	Other Root and Cereal Crops.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
GRAND TOTAL	2	8,720	8	1	33	8	5,167	6,228	1,422	286		
BRISTOL	18	14,730	802	20	204	14	69	15,047	7,543	2,361	131	
BRISTOL TOWNSHIP	88	8,840	8	4	164	14	10	5,208	5,547	806	132	
BRISTOL TOWNSHIP	1,001	4,844	5	9	1	1	5,392	4,468	1,223	171		
BRISTOL TOWNSHIP	84	4,610	20	1	29	1	6,160	3,268	544	341		
BRISTOL TOWNSHIP	3	1,007	1	1	3	1	1,808	5,146	273	80		
BRISTOL TOWNSHIP	850	4,694	60	1	1	1	7,587	5,043	938	80		
BRISTOL TOWNSHIP	2,011	4,969	5,650	1	1	1	18,011	3,774	1,284	217		
BRISTOL TOWNSHIP	264	1,774	50	1	89	1	1,328	2,147	277	284		
BRISTOL TOWNSHIP	1	2,423	178	1	7	1	2,500	2,159	547	89		
BRISTOL TOWNSHIP	323	4,696	7	1	11	8	5,385	5,487	680	106		
BRISTOL TOWNSHIP	81	3,725	108	1	1	1	3,724	1,507	729	208		
BRISTOL TOWNSHIP	689	2,178	1	1	1	1	8,255	4,811	645	292		
BRISTOL TOWNSHIP	478	2,400	161	1	402	8	2,460	5,787	888	692		
BRISTOL TOWNSHIP	833	4,609	2,303	1	5	1	8,094	5,775	2,131	627		
BRISTOL TOWNSHIP	729	6,881	28	3	703	1	10,346	4,767	1,930	30		
BRISTOL TOWNSHIP	18	10,388	77	1	3	4	10,388	8,944	3,472	53		
BRISTOL TOWNSHIP	264	10,542	408	2	463	117	10,388	7,280	4,804	46		
BRISTOL TOWNSHIP	223	6,679	307	9	148	16	8,455	5,745	1,323	628		
BRISTOL TOWNSHIP	1,944	16,669	67	1	14	29	18,225	8,940	3,867	87		
BRISTOL TOWNSHIP	306	2,801	49	4	68	1	7,443	8,470	1,872	115		
BRISTOL TOWNSHIP	303	6,643	8	4	48	1	4,843	4,206	798	194		
BRISTOL TOWNSHIP	584	4,411	818	18	202	7	8,890	8,179	806	832		
BRISTOL TOWNSHIP	181	21,293	1	1	1	1	22,540	7,270	7,329	208		
BRISTOL TOWNSHIP	184	5,764	15	4	169	1	4,124	4,304	904	104		
BRISTOL TOWNSHIP	840	4,610	28	2	26	1	8,358	4,384	1,694	195		
BRISTOL TOWNSHIP	1,720	11,403	503	1	87	67	12,747	7,335	1,905	175		
BRISTOL TOWNSHIP	547	7,747	18	1	1	1	7,815	8,719	1,200	624		
BRISTOL TOWNSHIP	880	10,290	56	28	181	14	20,320	10,119	2,384	42		
BRISTOL TOWNSHIP	1,184	7,659	38	1	7	1	8,906	3,945	1,802	529		
BRISTOL TOWNSHIP	7	9,768	2	1	31	1	9,818	4,852	861	146		
BRISTOL TOWNSHIP	410	11,017	7,144	1	31	1	10,379	4,128	4,385	1,678		
BRISTOL TOWNSHIP	8	12,279	870	3	37	3	11,958	2,071	2,071	62		
BRISTOL TOWNSHIP	306	2,022	1	1	16	1	3,121	5,018	620	83		
BRISTOL TOWNSHIP	407	8,843	1	1	1	1	4,609	2,074	650	80		
BRISTOL TOWNSHIP	30	5,478	1	2	131	1	4,978	5,614	382	189		
BRISTOL TOWNSHIP	184	17,672	18	8	65	5	12,267	8,067	3,845	846		
BRISTOL TOWNSHIP	180	4,459	9	1	62	1	4,503	8,719	1,896	680		
BRISTOL TOWNSHIP	180	8,204	16,180	9	27	1	15,489	7,889	8,386	607		
BRISTOL TOWNSHIP	24	8,682	126	1	86	1	8,288	4,667	2,442	480		
BRISTOL TOWNSHIP	887	8,897	5,118	7	100	1	11,478	3,008	3,047	222		
BRISTOL TOWNSHIP	200	5,720	46	1	15	1	5,684	1,845	825	144		
BRISTOL TOWNSHIP	134	4,844	2,004	12	22	1	10,011	5,481	3,826	406		
BRISTOL TOWNSHIP	806	5,386	119	1	1	1	4,148	1,369	551	518		
BRISTOL TOWNSHIP	1,804	11,737	12,944	1	1	1	10,611	7,666	7,148	285		
BRISTOL TOWNSHIP	444	55,476	18	1	1	1	28,608	10,840	2,626	130		
BRISTOL TOWNSHIP	2,870	19,151	102	6	205	27	22,051	6,995	4,001	814		
BRISTOL TOWNSHIP	8	6,911	19	1	15	1	6,949	8,769	842	128		
BRISTOL TOWNSHIP	14	27,700	2	4	111	1	22,715	10,446	3,844	61		
BRISTOL TOWNSHIP	889	2,401	347	8	347	1	8,754	8,192	274	74		
BRISTOL TOWNSHIP	241	7,779	9,018	10	414	1	12,280	2,064	4,996	680		
BRISTOL TOWNSHIP	609	5,191	500	2	38	1	8,223	2,034	306	213		
BRISTOL TOWNSHIP	808	5,124	136	1	1	1	2,080	1,269	560	182		
BRISTOL TOWNSHIP	823	10,265	318	1	1	1	11,384	2,079	3,274	270		
BRISTOL TOWNSHIP	2,229	5,679	304	1	8	1	4,283	3,730	1,546	282		
BRISTOL TOWNSHIP	379	8,665	12	8	850	1	4,350	3,751	1,096	960		
BRISTOL TOWNSHIP	176	4,134	6,114	36	18	1	8,638	5,187	3,524	184		
BRISTOL TOWNSHIP	176	1,061	86	1	163	1	2,064	2,064	661	274		
BRISTOL TOWNSHIP	89	8,447	560	2	1	1	10,099	2,063	2,368	270		
BRISTOL TOWNSHIP	1,413	4,468	94	1	1	1	5,070	4,905	1,560	466		
BRISTOL TOWNSHIP	827	1,214	24	1	12	1	2,067	1,304	328	165		
BRISTOL TOWNSHIP	597	8,740	28	1	228	4	8,367	6,145	1,314	490		
BRISTOL TOWNSHIP	478	30,638	17	1	4	2	30,658	5,189	7,776	184		
BRISTOL TOWNSHIP	18	5,038	18	1	1	1	8,027	4,132	1,818	64		
BRISTOL TOWNSHIP	142	2,609	4	8	227	8	8,463	3,869	417	316		
BRISTOL TOWNSHIP	14	11,130	29	2	694	1	11,818	16,077	847	28		
BRISTOL TOWNSHIP	1,651	7,383	5,208	1	1	1	14,225	8,074	5,308	224		
BRISTOL TOWNSHIP	137	5,906	6,430	7	1	4	11,804	4,232	5,034	300		
BRISTOL TOWNSHIP	746	8,811	129	1	18	1	8,896	4,103	1,184	261		
BRISTOL TOWNSHIP	27	5,933	15	1	22	1	6,000	4,160	644	62		
BRISTOL TOWNSHIP	1,057	5,448	1,378	1	64	1	7,167	8,013	1,620	717		
BRISTOL TOWNSHIP	384	5,714	41	1	321	1	4,280	2,235	1,607	387		
BRISTOL TOWNSHIP	1,523	8,720	181	4	448	1	11,576	6,517	7,770	213		
BRISTOL TOWNSHIP	137	2,260	14	1	201	1	2,612	2,647	989	182		
BRISTOL TOWNSHIP	100	5,162	1,816	10	149	2	17,612	2,063	3,843	711		
BRISTOL TOWNSHIP	379	8,647	4,420	1	1	1	8,446	5,021	2,262	146		
BRISTOL TOWNSHIP	598	10,056	824	1	3	1	11,497	5,088	2,127	1,827		
BRISTOL TOWNSHIP	84	5,266	43	4	1,061	1	7,206	7,062	511	86		
BRISTOL TOWNSHIP	1,120	9,071	9,706	20	30	1,169	11,722	4,018	4,943	860		
BRISTOL TOWNSHIP	430	8,966	1,808	1	1	1	7,360	2,761	1,674	874		
TOTAL	83,740	1,288,292	163,703	471	16,780	8,165	608	1,408,068	287,134	227,816	44,021	

OTHER CROPS IN THE YEAR 1880, THE VALUATION IN 1880, AND THE POPULATION IN 1881—continued.

IN STATUTE ACRES.							EXTENT FOR HAY SEED.			Total Extent in Acres.	Valuation in 1880.	Population in 1881.	POOR LAW UNIONS.
Grass Crops.							Grass, Hay, and Other Crops.						
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	£			
1	213	30	27	271	5,555	25	5,212	14,548	50,097	25,719	51,373	GRANHAM.	
2	222	345	5	569	12,397	169	4,447	5,253	25,325	25,095	32,444	GRANHAM.	
3	28	70	63	98	4,323	1,646	9,324	5,184	25,335	45,148	17,845	GRANHAM.	
4	211	16	16	227	4,327	7,358	2,358	22,549	42,540	77,084	20,034	KIRKBY.	
5	179	18	18	197	4,327	73	5,402	14,541	25,439	39,554	15,625	KIRKBY.	
6	120	8	17	137	4,128	34	4,162	7,905	14,195	20,091	10,790	KIRKBY.	
7	51	8	7	58	4,384	1,361	4,818	418	20,190	44,778	19,877	KIRKBY.	
8	494	12	7	506	4,435	4,013	12,894	27,763	26,192	29,733	29,733	KIRKBY.	
9	174	1	1	175	4,333	3	1,267	7,906	12,367	25,508	11,825	KIRKBY.	
10	36	1	1	37	2,973	3	780	1,540	8,354	20,968	10,125	KIRKBY.	
11	170	24	63	257	7,664	4	1,095	20,637	59,685	71,737	44,934	KIRKBY.	
12	177	4	3	181	7,785	9	1,054	9,134	5,933	25,194	10,704	KIRKBY.	
13	434	4	8	442	5,223	118	5,444	98,351	87,145	120,249	24,879	KIRKBY.	
14	7	4	8	15	2,011	2	1,158	18,793	11,979	20,830	25,025	KIRKBY.	
15	31	21	3	55	6,294	32	4,123	4,281	23,708	39,223	21,368	KIRKBY.	
16	12	54	1	67	5,808	316	7,779	18,365	15,398	165,158	27,246	KIRKBY.	
17	245	36	1	281	6,550	2,322	4,478	9,043	59,874	49,849	18,411	KIRKBY.	
18	126	140	24	290	10,267	2,004	7,349	13,994	43,998	68,970	29,721	KIRKBY.	
19	135	7	8	142	5,860	4	3,254	27,428	45,939	156,685	73,281	KIRKBY.	
20	114	220	16	411	14,674	2,593	14,708	4,864	60,234	178,131	88,618	KIRKBY.	
21	265	12	1	266	5,630	1,127	3,798	2,259	18,138	45,925	17,384	KIRKBY.	
22	12	37	1	49	5,411	1,455	1,455	14,478	27,474	59,347	26,544	KIRKBY.	
23	634	3	30	667	7,885	7,885	2,708	23,453	31,453	81,453	15,465	KIRKBY.	
24	434	60	10	494	15,487	1,795	5,474	36,063	36,063	124,225	25,711	KIRKBY.	
25	434	11	10	455	6,926	23	2,369	13,790	20,244	62,708	24,314	KIRKBY.	
26	597	1	364	770	8,295	4	854	15,521	28,660	71,548	27,237	KIRKBY.	
27	39	120	25	194	10,235	442	1,330	5,527	14,029	44,029	61,822	KIRKBY.	
28	111	534	10	645	12,744	1,065	3,060	10,611	30,227	61,122	25,432	KIRKBY.	
29	217	65	27	279	15,299	5,166	7,191	6,811	65,811	65,811	41,020	KIRKBY.	
30	517	3	3	520	6,693	5	4,367	14,639	20,244	62,708	24,314	KIRKBY.	
31	429	1	30	460	5,823	103	103	24,427	25,244	43,685	27,325	KIRKBY.	
32	143	102	19	264	10,235	1,320	7,641	3,837	89,354	94,129	27,433	KIRKBY.	
33	423	78	5	506	8,741	1,320	2,147	7,706	26,624	26,624	22,220	KIRKBY.	
34	265	70	6	341	5,678	2	1,422	7,707	16,611	59,347	13,811	KIRKBY.	
35	264	16	8	288	4,823	1	1,651	3,836	20,237	49,128	35,764	KIRKBY.	
36	230	8	12	250	4,458	28	819	19,798	24,647	28,448	26,008	KIRKBY.	
37	51	13	13	77	12,660	4,377	5,236	4,892	50,418	51,308	25,947	KIRKBY.	
38	265	96	419	730	8,813	1	1,674	8,219	28,351	40,462	17,048	KIRKBY.	
39	212	40	36	288	14,168	1	3,366	16,360	26,367	189,660	34,785	KIRKBY.	
40	247	14	123	374	7,764	1	1,677	20,467	49,158	129,460	30,423	KIRKBY.	
41	37	7	9	53	7,667	1	5,793	2,269	22,695	43,769	148,255	26,025	KIRKBY.
42	49	8	47	104	2,947	2	2,118	12,226	31,194	69,594	17,981	KIRKBY.	
43	616	98	39	753	10,219	7	7,141	16,431	45,440	34,438	29,596	KIRKBY.	
44	135	3	16	154	4,794	1	969	21,919	23,427	63,127	36,235	KIRKBY.	
45	756	15	9	770	19,239	1	11,421	4,447	69,718	124,222	37,236	KIRKBY.	
46	345	31	26	392	14,473	5,212	14,874	2,335	66,237	169,914	47,729	KIRKBY.	
47	719	366	9	1,094	13,699	3,464	13,691	1,693	24,834	143,375	49,991	KIRKBY.	
48	119	8	11	138	5,195	1,18	4,914	5,478	24,832	62,831	26,121	KIRKBY.	
49	207	4	1	212	15,445	4,764	9,349	8,613	66,613	167,216	51,244	KIRKBY.	
50	61	1	8	69	2,639	277	2,639	2,639	9,239	34,848	26,764	KIRKBY.	
51	148	12	240	308	12,264	1	4,444	16,226	43,825	109,949	30,283	KIRKBY.	
52	148	2	161	311	8,447	1	50	8,073	15,610	26,542	12,010	KIRKBY.	
53	46	8	8	62	3,345	1	3,773	7,182	15,778	27,153	27,153	KIRKBY.	
54	201	3	97	241	7,122	1	5,233	16,569	42,339	736,015	35,480	KIRKBY.	
55	196	1	3	199	4,835	1	3,419	7,864	18,371	36,019	18,124	KIRKBY.	
56	217	4	235	456	7,869	1	1,125	11,625	39,699	64,237	29,405	KIRKBY.	
57	222	8	71	292	8,881	1	4,279	13,335	37,176	61,470	24,726	KIRKBY.	
58	126	7	5	138	5,828	1	747	14,990	26,891	55,994	15,994	KIRKBY.	
59	316	5	62	383	8,285	2	6,665	8,283	35,321	50,391	16,008	KIRKBY.	
60	104	43	21	168	7,483	2	5,463	8,894	21,311	47,173	40,508	KIRKBY.	
61	137	24	8	169	5,977	1	674	2,468	7,186	15,136	12,869	KIRKBY.	
62	516	3	19	538	8,961	7	5,137	10,445	62,578	99,998	49,083	KIRKBY.	
63	696	66	66	828	12,430	5,824	9,606	9,606	66,371	197,098	44,002	KIRKBY.	
64	89	21	2	112	5,219	2,262	5,285	3,816	56,393	26,412	17,449	KIRKBY.	
65	91	4	3	100	4,766	1	564	11,412	28,915	50,813	21,764	KIRKBY.	
66	436	4	8	448	12,372	7	2,281	6,144	31,591	41,461	25,714	KIRKBY.	
67	546	23	1	570	5,332	1	1,337	3,968	26,841	86,117	16,811	KIRKBY.	
68	501	23	1	525	8,760	1	5,932	17,714	29,714	50,644	29,714	KIRKBY.	
69	807	3	2	812	8,311	1	1,204	27,748	43,284	142,917	41,976	KIRKBY.	
70	258	4	2	264	5,348	1	1,587	6,018	26,694	49,732	25,721	KIRKBY.	
71	846	12	49	907	8,758	6	5,235	20,332	49,612	87,846	59,478	KIRKBY.	
72	35	8	38	162	4,330	1	5,116	19,739	27,089	169,842	18,254	KIRKBY.	
73	262	37	509	808	12,328	8	9,647	8,492	35,490	74,790	39,282	KIRKBY.	
74	250	54	868	1,192	5,686	3	8,719	16,536	33,441	12,421	12,421	KIRKBY.	
75	169	7	1	177	17,604	1	2,684	11,333	45,763	62,365	27,349	KIRKBY.	
76	116	8	45	169	5,795	1	3,699	4,384	25,032	48,620	11,865	KIRKBY.	
77	264	22	232	774	7,774	4	4,399	4,399	30,983	104,224	51,169	KIRKBY.	
78	250	11	18	269	10,090	1	280	6,091	30,198	44,135	46,004	KIRKBY.	
79	250	27	5	282	10,070	1	5,768	4,487	47,072	798,424	39,145	KIRKBY.	
80	169	7	1	177	4,691	1	1,671	2,669	17,425	29,060	20,011	KIRKBY.	
81	6,437	6,014	7,964	22,415	1,318,749	112,462	670,242	1,217,208	3,886,896	1,693,287	1,744,636	Total.	

* See note on page 25, 26, 27. † See note on page 28.

Printed image digitised by the University of Southampton Library Digitisation Unit

TABLE 8.—SHOWING, BY POOR LAW UNION, THE

POOR LAW UNION.	PRODUCE							
	CEREALS, BEANS, AND FRUIT.							
	Wheat.	Oats.	Barley.	Rye.	Rye.	Beans.	Peas.	
	Grain of 100 lbs.	Grain of 100 lbs.	Grain of 100 lbs.	Grain of 100 lbs.	Grain of 100 lbs.	Grain of 100 lbs.	Grain of 100 lbs.	
ABINGDON, ...	2,402	122,120	121,208	42	82			
ABINGDON, ...	4,204	155,100	155,100	520	45	1,807	272	
ABINGDON, ...	6,849	150,480	84,183	30	150	644	425	
ABINGDON, ...	18,310	204,200	140	47	1,800	1,800	150	
ABINGDON, ...	532	70,000	607	39	2,153			
ABINGDON, ...	18,808	172,371	237,788	77	238	34	12	
ABINGDON, ...	230	71,107						
ABINGDON, ...	2,309	87,145	2,455	124	4,590	54	540	
ABINGDON, ...	1,103	70,000	2,979	23	1,144			
ABINGDON, ...	27,004	110,791	1,032	185	2,080	12		
ABINGDON, ...	270	198,420	8,115	20	14	4,905	20	
ABINGDON, ...	2,250	40,010	64	20	201			
ABINGDON, ...	1,046	207,081	18	14	149		18	
ABINGDON, ...	510	270,072	80		112	112	42	
ABINGDON, ...	1,046	30,485	23		2,172	262	12	
ABINGDON, ...	8,000	2,700	6,800		107	274		
ABINGDON, ...	20,412	80,000	31,104	90	223		100	
ABINGDON, ...	1,400	100,175	6,033					
ABINGDON, ...	6,427	208,270	300	92	129	236	79	
ABINGDON, ...	8,763	114,884	11,203	30	104		12	
ABINGDON, ...	9,002	20,180	28	15	203			
ABINGDON, ...	279	82,283	20		243			
ABINGDON, ...	8,741	100,000	100	80	52	184	60	
ABINGDON, ...		42,202	1,707	50	8,749			
ABINGDON, ...	4,707	80,000	100,000		984		18	
ABINGDON, ...	3,607	100,012	601		2,207		12	
ABINGDON, ...	90	47,180		24	103			
ABINGDON, ...	23,419	80,000	17,648					
ABINGDON, ...	21,332	207,018	80,000					
ABINGDON, ...	5,800	101,075	10,000	10	60			
ABINGDON, ...	84	46,172	20	5	2,732	34		
ABINGDON, ...	12,270	74,112	80		70			
ABINGDON, ...	27,730	107,648	20,000	17	94	81	26	
ABINGDON, ...	2,500	81,749	1,070	71	1,812			
ABINGDON, ...	24	107,070	24					
ABINGDON, ...	2,876	31,075	21,248		80			
ABINGDON, ...	840	104,560	42		207			
ABINGDON, ...	171	115,184	1,800	84	3,878	82		
ABINGDON, ...	116	81,000	21					
ABINGDON, ...	8,870	150,000	24	123	1,040	88	54	
ABINGDON, ...	23,234	107,110	6,770	129			400	
ABINGDON, ...	900	100,000	447	117	4,703			
ABINGDON, ...	225	20,000	2,000	84	8,100			
ABINGDON, ...	41,000	107,100	400		50			
ABINGDON, ...	3,870	150,000	200		78	22	20	
ABINGDON, ...	23,230	71,482	48,801		909			
ABINGDON, ...	5,800	70,000	80	60	1,125	81		
ABINGDON, ...	10,000	34,400	560		72			
ABINGDON, ...	800	203,200	16,270		180	207	428	
ABINGDON, ...	3,000	104,000	440	24	1,360	49	24	
ABINGDON, ...	1,100	101,000	224	80	800		11	
ABINGDON, ...	10,000	100,000	40,000	15	72	60	60	
ABINGDON, ...	4,000	7,000	411		412			
ABINGDON, ...	10,000	31,004	4,000		14			
ABINGDON, ...	140	40,000	20		200			
ABINGDON, ...	210	80,274	1,122	60	2,201	72		
ABINGDON, ...	1,200	40,000	128	18	2,542	100		
ABINGDON, ...	100,000	200,000	600		494	220	220	
ABINGDON, ...	10,400	122,070	62,444	14		100		
ABINGDON, ...	3,070	64,300	6,410		734			
ABINGDON, ...	32,200	81,207	10,704		180	25	640	
ABINGDON, ...	14,140	34,204	348		94		43	
ABINGDON, ...	10,000	100,000	100,000		80	112		
ABINGDON, ...	340	80,000	1,000	72	2,100		50	
ABINGDON, ...	5,070	100,000	12		707	16		
ABINGDON, ...	8,200	64,000	7,400		94			
ABINGDON, ...	18,400	60,007	210	45	204	60		
ABINGDON, ...	3,000	40,000	280		80			
ABINGDON, ...	6,400	100,000	40,000	107	4,200	80		
ABINGDON, ...	8,000	40,100	800		1,600	801		
ABINGDON, ...	21,400	30,000	100,000	22		74	11	
ABINGDON, ...	2,300	80,000	100	62	2,007	70	21	
ABINGDON, ...	1,307	10,000	940	20	2,800	20		
ABINGDON, ...	17,114	100,000	4,801	15	174	30		
ABINGDON, ...	64,000	14,700	41	674		94	600	
ABINGDON, ...	24	70,000	42	85	2,007			
ABINGDON, ...	8,000	34,000	10	12	6,110			
ABINGDON, ...	20,000	144,721	50,000	40		1,100	20	
ABINGDON, ...	17,648	10,000	10,000	20	1,201	94	100	

PRODUCES OF THE CROPS IN THE YEAR 1880.

[illegible]

TABLE 5.—SHOWING, BY POOR LAW UNION, THE

POOR LAW UNION.	PRODUCE						
	CEREALS, BEANS, AND FRUIT.						
	Wheat.	Oats.	Barley.	Rye.	Rye.	Beans.	Fruit.
	Cwt. of 100 lbs.	Cwt. of 100 lbs.	Cwt. of 100 lbs.	Cwt. of 100 lbs.	Cwt. of 100 lbs.	Cwt. of 100 lbs.	Cwt. of 100 lbs.
GRANDT, ...	36	102,037	85	13	256	80	
IRISHWICK, ...	907	181,553	16,412	283	2,354	503	266
IRISHWICK, ...	909	70,381	71	49	8,805	174	65
KANTON, ...	20,501	50,384	1,891		127	7	32
KELLS, ...	802	75,648	319	14	203	24	
KELLS, ...	24	18,378	8		50		
KILBEGG, ...	8,923	78,579	346	11	10		
KILBEGG, ...	80,481	79,589	78,811		82		
KILBEGG, ...	4,679	12,446	724	4	802		
KILBEGG, ...	14	84,329	2,880	13	51		
KILBEGG, ...	4,496	81,593	112		120	85	
KILBEGG, ...	1,139	62,572	2,028				
KILBEGG, ...	16,540	64,303	119		80		
KILBEGG, ...	10,892	24,317	1,744	21	5,137	86	24
KILBEGG, ...	12,347	78,443	30,593		60		
KILBEGG, ...	11,394	125,893	642	126		14,740	8
KILBEGG, ...	203	128,764	215		24	44	114
KILBEGG, ...	4,590	285,456	5,321	45	4,655	2,075	43
KILBEGG, ...	8,517	81,479	7,703	3	1,492	284	
KILBEGG, ...	18,593	268,289	771	30	174	1,021	298
KILBEGG, ...	4,228	285,292	814	43	490		
KILBEGG, ...	6,512	56,843	168	43	544		
KILBEGG, ...	8,127	49,314	8,914	162	2,981	141	
KILBEGG, ...	1,385	431,185	89			2,582	78
KILBEGG, ...	1,373	90,261	125	85	5,428		
KILBEGG, ...	8,755	77,044	819	54	809		
KILBEGG, ...	26,283	184,264	5,971		1,289	583	56
KILBEGG, ...	8,164	184,744	501		12		
KILBEGG, ...	12,542	205,289	228	124	1,773	263	147
KILBEGG, ...	22,263	185,737	482		64		
KILBEGG, ...	72	82,124	54	18	1,685		
KILBEGG, ...	6,451	175,798	123,293			47	
KILBEGG, ...	192	142,222	4,702	40	613	49	879
KILBEGG, ...	4,296	40,023			108	8	
KILBEGG, ...	1,091	81,508	112		12		
KILBEGG, ...	828	81,899		22	1,573		
KILBEGG, ...	2,411	175,102	126	31	294	123	11
KILBEGG, ...	388	74,251	32		866	11	16
KILBEGG, ...	8,147	180,597	189,147	28	403	32	18
KILBEGG, ...	488	116,169	1,700		843		24
KILBEGG, ...	16,541	125,447	56,129	58	3,027		
KILBEGG, ...	2,429	27,267	748		599		
KILBEGG, ...	5,419	121,614	86,464	210	509		
KILBEGG, ...	16,969	47,553	1,129		17		
KILBEGG, ...	16,546	244,283	225,709			165	11
KILBEGG, ...	3,523	225,084	184			88	86
KILBEGG, ...	40,504	283,889	5,768	84	114	8,250	424
KILBEGG, ...	126	74,488	268		291	16	
KILBEGG, ...	281	201,285	35	45	1,658	14	19
KILBEGG, ...	4,572	27,268	6,516	123	5,801		
KILBEGG, ...	5,444	187,269	121,018	183	7,332		24
KILBEGG, ...	12,299	302,229	5,194	26	429		
KILBEGG, ...	8,746	85,128	3,178		10		
KILBEGG, ...	15,626	126,669	4,228				
KILBEGG, ...	20,694	40,784	4,398		98		
KILBEGG, ...	2,129	43,820	179	84	4,712		
KILBEGG, ...	2,129	73,745	23,878	819	687		
KILBEGG, ...	1,561	1,561	1,561		2,603		
KILBEGG, ...	1,154	172,706	8,394	27	642		
KILBEGG, ...	10,771	51,281	535				
KILBEGG, ...	11,387	28,611	679		154		
KILBEGG, ...	6,953	80,708	429	13	2,623	49	30
KILBEGG, ...	7,629	426,419	294		75	32	
KILBEGG, ...	418	185,235	186		72		12
KILBEGG, ...	5,594	84,636	46	26	5,619	228	
KILBEGG, ...	983	128,704	715	26	7,253		
KILBEGG, ...	28,486	57,944	84,459				
KILBEGG, ...	2,270	84,808	120,600	112		64	
KILBEGG, ...	11,983	68,445	2,402		184		
KILBEGG, ...	487	86,798	207		243		
KILBEGG, ...	26,529	390,226	28,122		882		
KILBEGG, ...	7,643	31,325	1,264	14	1,715	10	
KILBEGG, ...	10,618	114,082	9,318	86	6,803	11	69
KILBEGG, ...	1,332	84,776	213		3,443		
KILBEGG, ...	1,507	140,222	140,222	102	2,478	87	36
KILBEGG, ...	5,907	64,204	87,613		12		26
KILBEGG, ...	36,125	184,643	14,807		24		
KILBEGG, ...	1,337	61,612	703	28	13,311	16	
KILBEGG, ...	14,626	120,323	148,819	804	194	21,270	
KILBEGG, ...	8,638	50,510	24,200				
TOTAL, ...	1,436,263	17,839,645	3,042,222	5,129	208,435	87,270	8,128

PRODUCE OF THE CROPS IN THE YEAR 1899—continued.

OF THE CROPS.

Grass Crops.										Hay.		FOUR LAW UNIONS.
Produce.	Turnips.	Straw and other crops.	Grass and clover.	Other crops.	Turnips.	Hay.	Produce.	Hay.	Produce.	Hay.	Produce.	
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
16,278	16,278	3,519	42	5,020	248	143	747	5,182	46,778	46,778	46,778	GRANVILLE.
24,788	24,788	1,745	399	11,086	3,696	58	5,580	15,581	8,326	8,326	8,326	HEATHFIELD.
3,103	3,103	1,732	212	612	38	24	26,930	6,313	22,556	22,556	22,556	HEATHFIELD.
13,138	13,138	2,187	339	4,463	1,286	237	5,582	85,523	85,523	85,523	85,523	KILPATRICK.
10,800	10,800	2,047	216	1,643	40	100	1,735	8,730	22,136	22,136	22,136	KILPATRICK.
11,420	11,420	745	61	4,512	92	156	1,335	14,511	14,511	14,511	14,511	KILPATRICK.
25,417	25,417	1,102	89	453	24	47	37,273	5,355	369	369	369	KILPATRICK.
12,087	12,087	2,381	131	2,382	10	47	105	2,014	16,522	16,522	16,522	KILPATRICK.
6,127	6,127	2,382	131	2,382	10	47	105	2,014	16,522	16,522	16,522	KILPATRICK.
6,284	6,284	238	1	267	1	1	75	1,081	8,716	8,716	8,716	KILPATRICK.
12,085	12,085	1,125	235	7,353	162	323	69	2,087	42,731	42,731	42,731	KILPATRICK.
6,999	6,999	2,455	177	1,653	28	7	8,073	2,701	11,372	11,372	11,372	KILPATRICK.
15,495	15,495	2,045	130	7,055	1	10	1,000	1,000	70,564	70,564	70,564	KILPATRICK.
16,260	16,260	1,974	69	4,360	21	35	5,527	65,766	65,766	65,766	65,766	KILPATRICK.
11,422	11,422	1,270	174	530	184	35	789	7,664	6,726	6,726	6,726	KILPATRICK.
12,085	12,085	423	4	76	332	15	16,235	17,434	23,685	23,685	23,685	KILPATRICK.
12,085	12,085	443	40	1,510	592	10	71,371	4,379	5,573	5,573	5,573	KILPATRICK.
22,811	22,811	236	84	1,235	1,085	220	164,774	14,774	2,327	2,327	2,327	KILPATRICK.
24,430	24,430	13,154	701	5,122	40	34	106	3,516	72,851	72,851	72,851	KILPATRICK.
39,542	39,542	717	636	1,155	4,334	130	26,517	17,739	21,435	21,435	21,435	KILPATRICK.
16,505	16,505	4,556	347	2,882	158	19	7,712	4,250	1,250	1,250	1,250	KILPATRICK.
12,450	12,450	2,139	222	635	226	7	28,551	2,041	20,229	20,229	20,229	KILPATRICK.
16,262	16,262	1,189	213	8,850	58	664	41,565	1,634	41,565	41,565	41,565	KILPATRICK.
26,638	26,638	1,027	241	6,330	471	138	83,588	15,023	3,408	3,408	3,408	KILPATRICK.
17,437	17,437	9,287	140	8,278	99	86	1,436	6,941	29,528	29,528	29,528	KILPATRICK.
16,262	16,262	2,869	6	5,730	2,853	1	5,730	35,473	35,473	35,473	35,473	KILPATRICK.
25,380	25,380	1,114	435	1,165	210	19,469	10,522	25,338	25,338	25,338	25,338	KILPATRICK.
25,130	25,130	2,504	122	4,459	1,910	479	1,028	1,028	1,028	1,028	1,028	KILPATRICK.
26,638	26,638	721	269	1,393	612	214	363,732	20,529	21,518	21,518	21,518	KILPATRICK.
16,439	16,439	3,323	372	5,518	1,356	20	165	6,997	38,278	38,278	38,278	KILPATRICK.
14,301	14,301	2,594	112	4,789	367	33	487	42,522	42,522	42,522	42,522	KILPATRICK.
17,437	17,437	24,846	174	927	569	13	13,586	7,327	1,320	1,320	1,320	KILPATRICK.
16,604	16,604	838	40	6,483	344	43	44,685	5,595	5,595	5,595	5,595	KILPATRICK.
16,519	16,519	827	12	6,472	1,962	117	50	2,518	17,139	17,139	17,139	KILPATRICK.
16,518	16,518	1,881	182	2,963	61	56	4,730	20,669	20,669	20,669	20,669	KILPATRICK.
15,732	15,732	1,428	6	1,160	80	83	1,798	2,429	67,736	67,736	67,736	KILPATRICK.
26,131	26,131	5,615	116	7,421	401	709	169,070	20,582	13,151	13,151	13,151	KILPATRICK.
15,285	15,285	2,874	74	3,060	215	1,632	3,130	17,116	17,116	17,116	17,116	KILPATRICK.
15,812	15,812	5,105	459	5,614	478	465	19,888	10,795	10,795	10,795	10,795	KILPATRICK.
11,185	11,185	6,595	834	8,130	64	1,364	6,132	48,233	48,233	48,233	48,233	KILPATRICK.
11,623	11,623	4,930	169	1,465	48	86	11,744	47,594	47,594	47,594	47,594	KILPATRICK.
4,764	4,764	2,759	161	734	44	292	4,180	20,997	20,997	20,997	20,997	KILPATRICK.
16,719	16,719	1,131	273	4,484	219	356	10,299	41,028	41,028	41,028	41,028	KILPATRICK.
16,569	16,569	2,568	85	6,775	21	112	25	5,230	55,907	55,907	55,907	KILPATRICK.
27,894	27,894	11,343	283	8,285	88	19	29,348	10,744	10,744	10,744	10,744	KILPATRICK.
27,439	27,439	1,147	152	846	715	275	172,502	27,716	5,598	5,598	5,598	KILPATRICK.
26,131	26,131	4,879	236	2,614	3,479	86	26,706	61,342	4,180	4,180	4,180	KILPATRICK.
14,918	14,918	2,435	71	1,443	58	75	3,331	7,816	17,555	17,555	17,555	KILPATRICK.
23,817	23,817	336	88	5,234	248	55	162,618	21,530	21,530	21,530	21,530	KILPATRICK.
15,445	15,445	1,641	50	307	8	68	836	5,203	5,203	5,203	5,203	KILPATRICK.
28,871	28,871	15,874	314	8,139	28	1,488	10,025	15,283	15,283	15,283	15,283	KILPATRICK.
7,671	7,671	2,577	116	1,410	27	1,181	1,080	16,514	16,514	16,514	16,514	KILPATRICK.
6,462	6,462	2,746	64	670	88	4	6,299	12,563	12,563	12,563	12,563	KILPATRICK.
12,771	12,771	8,851	184	2,817	138	265	10,585	32,027	32,027	32,027	32,027	KILPATRICK.
8,860	8,860	2,677	342	639	4	30	8,061	19,584	19,584	19,584	19,584	KILPATRICK.
16,830	16,830	2,678	51	2,888	28	1,376	28	5,444	22,042	22,042	22,042	KILPATRICK.
16,834	16,834	3,194	896	3,586	64	383	10,155	22,139	22,139	22,139	22,139	KILPATRICK.
6,072	6,072	3,114	211	1,490	81	21	1,054	32,885	32,885	32,885	32,885	KILPATRICK.
12,811	12,811	3,891	73	1,626	45	66	14,982	11,131	11,131	11,131	11,131	KILPATRICK.
16,832	16,832	7,659	148	2,210	430	284	6,565	11,169	11,169	11,169	11,169	KILPATRICK.
6,034	6,034	1,767	11	1,633	855	30	1,205	8,546	8,546	8,546	8,546	KILPATRICK.
24,706	24,706	6,818	371	7,540	33	190	185	8,322	40,880	40,880	40,880	KILPATRICK.
24,706	24,706	6,448	125	6,868	740	300	225,008	16,619	6,420	6,420	6,420	KILPATRICK.
18,244	18,244	866	54	870	72	30	30,216	4,646	7,280	7,280	7,280	KILPATRICK.
16,835	16,835	1,147	4	830	10	16	1,068	27,720	27,720	27,720	27,720	KILPATRICK.
22,830	22,830	238	18	5,024	24	78	161	6,130	12,538	12,538	12,538	KILPATRICK.
12,830	12,830	3,131	74	1,922	265	1	12,681	6,551	6,551	6,551	6,551	KILPATRICK.
15,679	15,679	3,223	134	4,858	130	24	11,619	22,508	22,508	22,508	22,508	KILPATRICK.
22,831	22,831	4,212	103	5,197	30	30	4,267	64,724	64,724	64,724	64,724	KILPATRICK.
26,407	26,407	602	86	8,136	32	20	4,262	14,731	14,731	14,731	14,731	KILPATRICK.
22,830	22,830	1,817	268	6,856	79	320	220	8,719	32,594	32,594	32,594	KILPATRICK.
6,513	6,513	4,446	125	1,886	53	291	7,768	23,171	23,171	23,171	23,171	KILPATRICK.
27,439	27,439	4,134	118	2,706	281	8,033	180	5,568	15,898	15,898	15,898	KILPATRICK.
6,728	6,728	2,002	104	2,666	14	14	4,168	19,333	19,333	19,333	19,333	KILPATRICK.
17,219	17,219	11,822	489	2,657	418	3,365	14,647	25,674	25,674	25,674	25,674	KILPATRICK.
15,236	15,236	1,718	156	3,320	80	283	6,598	15,197	15,197	15,197	15,197	KILPATRICK.
14,744	14,744	10,901	146	1,802	114	1	8,236	5,135	5,135	5,135	5,135	KILPATRICK.
22,526	22,526	458	15	4,276	65	160	82	14,572	14,572	14,572	14,572	KILPATRICK.
12,741	12,741	20,854	863	4,738	129	43	22,236	16,027	16,027	16,027	16,027	KILPATRICK.
16,020	16,020	5,618	363	1,300	69	1	2,307	4,014	4,014	4,014	4,014	KILPATRICK.
2,647,409	2,647,409	622,632	26,216	421,025	98,365	56,007	3,826,521	1,476,344	3,374,637	3,374,637	3,374,637	TOTAL.

TABLE 2.—SHOWING THE NUMBER OF HOLDINGS EXERCISING ANY AGRICULTURE, AND EXTENT OF LAND UNDER CROPS IN EACH YEAR FROM 1880 TO 1889, BY COUNTIES AND PROVINCES.

COUNTIES.	Year.	No. of Holdings exercising Agriculture.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1880 TO 1889.														Total Extent of Statute Acres.	
			CEREALS, GRASSES, AND PASTURE.							OTHER CROPS.								
			Wheat.	Barley.	Oats.	Rye.	Maize.	Grass.	Pasture.	Other Cereals.	Other Grasses.	Other Pastures.	Other Crops.	Other Grasses.	Other Pastures.	Other Crops.		
ARMAGH.																		
1880	20,267	3,020	77,257	991	20	59	2,000	64,274	41,001	20,720	2,242	56,718	18,320	82,000	214,000	214,000	214,000	
1881	20,267	4,442	76,442	1,204	2	81	2,000	64,779	40,000	20,720	2,242	56,718	18,320	82,000	214,000	214,000	214,000	
1882	20,267	4,599	77,947	1,100	18	91	2,000	65,121	44,204	20,720	2,242	56,718	18,320	82,000	214,000	214,000	214,000	
1883	20,267	5,228	75,810	1,000	3	81	2,000	64,407	44,225	16,804	275	52,028	16,804	80,131	207,027	207,027	207,027	
1884	20,267	1,200	74,430	908	5	29	2,234	74,100	42,094	16,321	341	52,007	16,321	80,882	207,027	207,027	207,027	
1885	20,489	1,500	73,807	1,104	1	20	1,915	70,073	43,004	17,291	354	52,007	17,291	80,882	207,027	207,027	207,027	
1886	20,488	2,347	72,811	1,200	7	27	1,931	71,704	44,800	16,804	201	52,007	16,804	80,882	207,027	207,027	207,027	
1887	20,506	2,140	73,411	1,300	4	41	2,214	70,094	44,470	16,804	210	52,007	16,804	80,882	207,027	207,027	207,027	
1888	20,505	2,203	73,404	1,300	5	94	1,800	75,133	44,407	16,270	140	52,007	16,270	80,882	207,027	207,027	207,027	
1889	20,510	2,340	73,601	1,300	12	24	1,324	74,000	43,072	16,804	200	52,007	16,804	80,882	207,027	207,027	207,027	
ARMAGH.																		
1880	15,820	5,481	60,000	210	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1881	15,815	7,101	60,100	200	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1882	15,810	5,700	62,707	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1883	15,811	5,900	61,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1884	15,800	5,300	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1885	15,791	5,300	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1886	15,784	4,907	59,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1889	15,775	5,000	61,707	180	0	11	1,06	54,741	37,074	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
ARMAGH.																		
1880	4,000	5,420	50,500	6,000	0	0	0	50,500	5,000	5,000	0	5,000	10,000	50,500	50,500	50,500	50,500	
1881	4,000	5,400	50,000	6,000	0	0	0	50,000	5,000	5,000	0	5,000	10,000	50,000	50,000	50,000	50,000	
1882	4,000	5,000	51,000	6,000	0	0	0	51,000	5,000	5,000	0	5,000	10,000	51,000	51,000	51,000	51,000	
1883	4,000	1,444	51,240	6,000	0	0	0	50,240	5,000	5,000	0	5,000	10,000	51,240	51,240	51,240	51,240	
1884	4,000	1,000	51,340	6,000	0	0	0	50,340	5,000	5,000	0	5,000	10,000	51,340	51,340	51,340	51,340	
1885	4,001	0	50,100	6,007	0	0	0	49,100	5,000	5,000	0	5,000	10,000	50,100	50,100	50,100	50,100	
1886	4,000	1,000	50,000	6,000	0	0	0	49,000	5,000	5,000	0	5,000	10,000	50,000	50,000	50,000	50,000	
1887	4,000	0	50,000	6,000	0	0	0	49,000	5,000	5,000	0	5,000	10,000	50,000	50,000	50,000	50,000	
1888	4,000	0	50,000	6,000	0	0	0	49,000	5,000	5,000	0	5,000	10,000	50,000	50,000	50,000	50,000	
1889	4,000	0	50,000	6,000	0	0	0	49,000	5,000	5,000	0	5,000	10,000	50,000	50,000	50,000	50,000	
ARMAGH.																		
1880	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1881	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1882	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1883	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1884	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1885	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1886	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1887	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1888	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1889	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
ARMAGH.																		
1880	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1881	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1882	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1883	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1884	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1885	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1886	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1887	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1888	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1889	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
ARMAGH.																		
1880	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1881	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1882	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1883	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1884	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1885	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1886	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1887	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1888	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1889	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
ARMAGH.																		
1880	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1881	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1882	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1883	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1884	15,800	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1885	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	400	5,440	38,200	15,000	43,070	100,000	100,000	
1886	15,810	5,400	60,000	180	0	20	420	55,173	37,340	8,007	4							

TABLE 9.—SHOWING THE NUMBER OF HOLDINGS EXHIBITING ONE ACRE, AND EXTENT OF LAND UNDER CROPS IN EACH YEAR FROM 1880 TO 1889, BY COUNTIES AND PROVINCES—continued.

COUNTRY.	Year.	No. of Machines operating 1 June	EXTENT UNDER COORDS IN STATUTE ACRES IN EACH YEAR FROM 1900 TO 1909.										TOTAL EXTENT THOUS. ACRES.		
			CORN, GRASS, AND FEED.					OTHER CROPS.							
			Wheat.	Oats.	Barley.	Hay.	Other.	Grain.	Grass.	Feed.	Other.	Other.			
DENMARK.	1900	8,152	4,884	14,378	5,411	65	65	25,183	16,149	3,295	8,428	16,544	48,150	88,437	
	1901	8,155	4,893	14,378	5,411	65	65	25,183	16,149	3,295	8,428	48,150	88,437		
	1902	8,091	4,869	14,378	5,411	65	65	25,183	16,149	3,295	8,428	48,150	88,437		
	1903	8,091	4,869	14,378	5,411	65	65	25,183	16,149	3,295	8,428	48,150	88,437		
	1904	8,091	4,869	14,378	5,411	65	65	25,183	16,149	3,295	8,428	48,150	88,437		
	1905	8,092	4,870	14,379	5,412	66	66	25,184	16,150	3,296	8,429	48,151	88,438		
	1906	8,128	4,906	14,386	5,420	67	67	25,210	16,166	3,302	8,435	48,166	88,444		
	1907	8,099	4,871	14,386	5,420	67	67	25,210	16,166	3,302	8,435	48,166	88,444		
	1908	8,105	4,876	14,387	5,421	67	67	25,211	16,167	3,303	8,436	48,167	88,445		
	1909	8,137	4,898	14,389	5,423	68	68	25,233	16,169	3,305	8,438	48,169	88,447		
FINLAND.	1900	10,078	885	20,069	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1901	10,052	879	20,059	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1902	10,071	882	20,069	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1903	10,061	798	20,059	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1904	10,079	800	20,069	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1905	10,078	800	20,069	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1906	10,078	800	20,069	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1907	10,071	722	20,059	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1908	10,071	722	20,059	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
	1909	10,071	722	20,059	50	25	129	30	24,280	15,131	2,899	798	825	57,658	104,022
GERMANY.	1900	34,485	4,884	33,396	6,585	18	566	40	64,130	48,740	12,340	3,088	88,437	211,292	
	1901	34,485	4,884	33,396	6,585	18	566	40	64,130	48,740	12,340	3,088	88,437	211,292	
	1902	34,485	4,884	33,396	6,585	18	566	40	64,130	48,740	12,340	3,088	88,437	211,292	
	1903	34,485	4,884	33,396	6,585	18	566	40	64,130	48,740	12,340	3,088	88,437	211,292	
	1904	34,485	4,884	33,396	6,585	18	566</								

TABLE 3.—SHOWING THE NUMBER OF HOLDINGS EXERCISING OUR AGRICULTURE, AND EXTENT OF LAND UNDER CROPS IN EACH YEAR FROM 1880 TO 1888, BY COUNTIES AND PARISHES.—continued.

COUNTY.	Year.	No. of Holdings in 1880.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1880 TO 1888.														TOTAL NUMBER OF STATUTE ACRES.	
			CEREALS, GRASSES, AND FRUIT.							OTHER CROPS.								
			Wheat.	Oats.	Barley.	Rye.	Spelt.	Other Cereals.	Grasses.	Hay.	Other Grasses.	Orchards.	Plantations.	Other Crops.	Other Crops.			
Dorsetshire.	1880	10,376	771	18,182	481	38	281	2	20,776	18,331	4,273	437	1,738	38,751	100	67,308	161,888	
	1881	10,372	457	17,500	271	4	241	3	20,550	18,301	4,442	404	1,738	38,513	99	66,947	161,504	
	1882	10,366	453	17,500	166	3	241	3	20,577	18,300	4,341	405	1,738	38,546	98	66,938	161,059	
	1883	10,368	453	17,500	166	3	241	3	20,577	18,300	4,341	405	1,738	38,546	98	66,938	161,059	
	1884	10,373	453	17,500	166	3	241	3	20,577	18,300	4,341	405	1,738	38,546	98	66,938	161,059	
	1885	10,374	453	17,500	166	3	241	3	20,577	18,300	4,341	405	1,738	38,546	98	66,938	161,059	
Gloucestershire.	1880	14,702	239	20,589	748	—	117	3	20,481	20,473	3,147	929	1,801	20,770	128	32,948	64,971	
	1881	14,702	239	20,589	748	—	117	3	20,481	20,473	3,147	929	1,801	20,770	128	32,948	64,971	
	1882	14,702	239	20,589	748	—	117	3	20,481	20,473	3,147	929	1,801	20,770	128	32,948	64,971	
	1883	14,702	239	20,589	748	—	117	3	20,481	20,473	3,147	929	1,801	20,770	128	32,948	64,971	
	1884	14,702	239	20,589	748	—	117	3	20,481	20,473	3,147	929	1,801	20,770	128	32,948	64,971	
	1885	14,702	239	20,589	748	—	117	3	20,481	20,473	3,147	929	1,801	20,770	128	32,948	64,971	
Hampshire.	1880	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1881	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1882	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1883	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1884	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1885	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
Kent.	1880	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1881	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1882	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1883	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1884	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1885	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
Leicestershire.	1880	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1881	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1882	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1883	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1884	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1885	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
Lincolnshire.	1880	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1881	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1882	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1883	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1884	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1885	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
Norfolk.	1880	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1881	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1882	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1883	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1884	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	
	1885	22,374	14,722	25,547	18,083	67	80	10	20,426	20,426	3,147	929	1,801	20,770	128	32,948	64,971	

TABLE 2.—SHOWING THE NUMBER OF HEADINGS EXCEEDING ONE ACRE, AND EXTENT OF LAND UNDER CROPS IN EACH YEAR FROM 1880 TO 1889, BY COUNTIES AND PROVINCES—continued.

PROVINCES.

PROVINCES.	Year.	No. of Headings exceeding 1 Acre.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1880 TO 1889.														Total Extent under Crops.
			CEREALS, GRASSES, AND FRUIT.							OTHER CROPS.							
			Wheat.	Oats.	Barley.	Maize.	Rye.	Strawberry.	Orchard.	Potatoes.	Turnips.	Other Rooted Crops.	Other Cereals.	Other Grasses.	Other Fruit.		
LEINSTER:	1880	106,607	44,797	367,418	120,191	187	8,007	4,269	811,208	158,458	102,681	15,644	91,317	292,487	2,157,607,458	1,000,000	
	1881	106,950	43,117	372,928	122,715	200	8,002	4,015	812,715	157,485	102,024	15,545	91,321	295,653	2,169,625,555	1,000,000	
	1882	102,102	44,005	371,107	122,159	181	7,162	3,925	805,537	158,367	97,848	15,407	90,627	298,559	2,117,949,872	1,000,000	
	1883	103,411	43,677	371,113	122,002	184	8,010	4,799	474,738	156,621	101,671	14,805	91,455	292,911	2,098,565,922	1,000,000	
	1884	104,653	43,414	370,938	118,198	189	7,561	3,338	448,236	165,477	100,070	15,050	90,681	297,082	2,059,665,922	1,000,000	
	1885	103,601	41,708	364,965	126,354	50	6,666	2,965	452,865	162,578	93,696	15,334	91,587	292,800	2,032,020,673	1,000,000	
	1886	105,595	42,538	366,274	124,732	117	8,110	2,716	451,280	163,651	95,247	15,338	92,058	295,848	2,078,545,101	1,000,000	
	1887	105,240	41,781	367,678	118,626	62	7,182	2,442	464,171	154,604	91,854	14,774	91,398	293,654	2,085,537,951	1,000,000	
	1888	104,777	40,640	360,449	121,807	77	7,084	2,946	461,548	163,874	95,085	15,338	91,411	293,778	2,048,077,412	1,000,000	
	1889	104,815	44,624	371,643	122,935	106	8,616	1,436	460,862	161,685	96,182	14,861	91,687	294,822	2,045,541,506	1,000,000	
MUNSTER:	1880	111,280	37,258	318,783	48,874	167	1,996	267	738,567	911,592	77,083	16,623	29,595	116,578	1,147,669,680	1,000,000	
	1881	112,514	37,454	322,645	49,284	89	1,969	498	761,314	126,622	77,582	17,467	31,244	112,544	1,169,655,152	1,000,000	
	1882	111,470	37,580	326,686	48,216	86	1,165	409	756,863	125,267	76,949	17,477	31,211	112,544	1,169,655,152	1,000,000	
	1883	110,890	36,319	316,919	44,801	89	1,333	671	739,355	166,187	76,799	16,518	31,211	112,544	1,169,655,152	1,000,000	
	1884	109,732	36,168	316,481	46,874	78	1,132	438	714,343	167,671	75,180	16,728	30,791	112,544	1,169,655,152	1,000,000	
	1885	116,698	33,707	344,671	45,895	106	1,272	507	718,561	186,295	74,146	16,656	30,696	112,544	1,169,655,152	1,000,000	
	1886	116,607	36,616	353,337	45,981	67	1,262	171	708,412	181,142	74,279	16,176	30,696	112,544	1,169,655,152	1,000,000	
	1887	116,007	36,617	353,337	45,981	67	1,262	171	708,412	181,142	74,279	16,176	30,696	112,544	1,169,655,152	1,000,000	
	1888	116,007	36,617	353,337	45,981	67	1,262	171	708,412	181,142	74,279	16,176	30,696	112,544	1,169,655,152	1,000,000	
	1889	116,007	36,617	353,337	45,981	67	1,262	171	708,412	181,142	74,279	16,176	30,696	112,544	1,169,655,152	1,000,000	
ULSTER:	1880	167,179	33,702	461,265	7,695	728	1,673	4,180	678,783	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1881	168,000	33,702	461,265	7,695	728	1,673	4,180	678,783	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1882	167,435	31,035	441,131	6,928	66	1,515	4,428	696,548	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1883	168,462	30,611	433,439	6,669	66	1,663	4,548	676,962	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1884	166,733	31,684	401,479	6,246	64	1,767	4,614	616,122	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1885	164,492	30,611	411,547	6,246	64	1,663	4,548	676,962	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1886	164,492	30,611	411,547	6,246	64	1,663	4,548	676,962	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1887	164,492	30,611	411,547	6,246	64	1,663	4,548	676,962	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1888	164,492	30,611	411,547	6,246	64	1,663	4,548	676,962	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
	1889	164,492	30,611	411,547	6,246	64	1,663	4,548	676,962	361,674	65,566	5,668	29,595	122,080	1,957,957,457	1,000,000	
CONNAUGHT:	1880	118,554	7,668	153,957	6,875	66	8,750	76	302,601	178,789	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1881	119,166	8,072	154,161	7,262	35	1,545	54	304,646	178,789	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1882	119,166	8,072	154,161	7,262	35	1,545	54	304,646	178,789	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1883	117,941	4,538	173,618	7,262	68	8,750	294	191,701	166,257	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1884	118,166	3,928	167,448	6,875	28	8,254	181	183,261	166,257	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1885	116,835	8,118	161,618	6,402	67	4,252	142	189,752	166,257	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1886	116,835	8,118	161,618	6,402	67	4,252	142	189,752	166,257	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1887	116,835	8,118	161,618	6,402	67	4,252	142	189,752	166,257	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1888	116,835	8,118	161,618	6,402	67	4,252	142	189,752	166,257	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	
	1889	116,835	8,118	161,618	6,402	67	4,252	142	189,752	166,257	25,696	8,545	14,495	291,596	1,320,768,199	1,000,000	

TOTAL OF IRELAND.

PROVINCES.	Year.	No. of Holdings exceeding 1 Acre.	EXTENT UNDER CROPS IN STATUTE ACRES IN EACH YEAR FROM 1880 TO 1889.														Totals EXTENT under CROPS.
			CEREALS, GRASSES, AND FRUIT.							OTHER CROPS.							
			Wheat.	Oats.	Barley.	Maize.	Rye.	Strawberry.	Orchard.	Potatoes.	Turnips.	Other Rooted Crops.	Other Cereals.	Other Grasses.	Other Fruit.	Other.	
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		
TOTAL OF IRELAND:	1880	577,000	548,798	1,873,988	218,010	602	7,207	10,337	1,800,477	688,000	392,681	41,807	12,801	1,512,545	12,801,000,000	6,000,000	
	1881	586,710	558,117	1,882,262	219,000	476	7,165	11,811	1,771,715	686,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000	
	1882	562,612	558,005	1,882,262	219,000	360	7,170	11,811	1,771,715	687,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000	
	1883	565,664	54,316	1,882,262	219,000	316	7,300	11,811	1,771,715	686,400	394,700	41,800	12,801	1,512,545	12,801,000,000	6,000,000	
	1884	552,441	47,809	1,882,262	219,000	266	7,346	8,739	1,800,477	686,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000	
	1885	568,880	73,617	1,882,262	219,000	275,122	8,000	5,141	1,800,477	687,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000	
	1886	568,449	65,846	1,882,262	219,000	295,019	8,700	1,800,477	686,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000		
	1887	568,880	67,381	1,882,262	219,000	308,071	7,900	1,800,477	686,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000		
	1888	568,880	68,812	1,882,262	219,000	308,071	8,000	1,800,477	686,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000		
	1889	568,880	70,341	1,882,262	219,000	427,033	8,000	1,800,477	686,000	394,302	41,800	12,801	1,512,545	12,801,000,000	6,000,000		

TABLE 10.—SHOWING THE AVERAGE RATE OF PRODUCE OF CROPS TO THE STATUTE ACRE, IN EACH YEAR,
FROM 1830 TO 1839.

[illegible]

TABLE 10.—SHOWING THE AVERAGE RATES OF PROGRESS TO THE STATUTE ACTS—continued

[illegible]

TABLE 10.—SHOWING THE AVERAGE RATES OF PRODUCE TO THE STATUTE ACRE—continued.

AVERAGE OF PROVINCES.

PROVINCE.	Year.	Wheat.	Oats.	Barley.	Maize.	Rye.	Beans.	Potatoes.	Peas.	Turnips.	Swedes.	Hay.	Straw.	Manure.	Other.
		Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.
LEINSTER.	1880	15-0	18-1	15-4	15-4	15-6	20-0	17-0	4-0	12-7	14-0	10-0	10-1	10-1	10-1
	1881	15-0	18-7	15-0	15-0	15-0	18-1	14-0	4-1	12-0	13-0	11-0	10-1	10-1	10-1
	1882	14-7	14-8	14-0	14-0	14-0	16-7	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
	1883	15-0	18-0	15-0	15-0	15-0	18-0	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
	1884	15-0	18-0	15-0	15-0	15-0	18-0	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
	1885	15-0	18-0	15-0	15-0	15-0	18-0	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
	1886	15-0	18-0	15-0	15-0	15-0	18-0	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
	1887	15-0	18-0	15-0	15-0	15-0	18-0	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
	1888	15-0	18-0	15-0	15-0	15-0	18-0	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
	1889	15-0	18-0	15-0	15-0	15-0	18-0	14-0	4-0	11-0	12-0	10-0	10-1	10-1	10-1
MUNSTER.	1880	15-1	17-0	17-0	15-8	16-0	17-4	15-8	4-0	12-7	14-7	10-0	10-1	10-1	10-1
	1881	14-0	15-0	15-1	14-8	11-2	17-1	13-7	4-1	12-0	13-8	10-0	10-1	10-1	10-1
	1882	13-0	14-0	14-0	14-0	14-0	17-1	13-7	4-1	12-0	13-8	10-0	10-1	10-1	10-1
	1883	13-0	14-0	14-0	14-0	14-0	17-1	13-7	4-1	12-0	13-8	10-0	10-1	10-1	10-1
	1884	13-0	14-0	14-0	14-0	14-0	17-1	13-7	4-1	12-0	13-8	10-0	10-1	10-1	10-1
	1885	14-7	14-0	14-0	14-4	11-1	17-1	13-5	4-0	11-0	12-7	10-0	10-1	10-1	10-1
	1886	13-0	14-0	14-0	14-0	11-1	17-1	13-5	4-0	11-0	12-7	10-0	10-1	10-1	10-1
	1887	14-0	14-0	14-0	14-0	11-1	17-1	13-5	4-0	11-0	12-7	10-0	10-1	10-1	10-1
	1888	13-0	14-0	14-0	14-0	11-1	17-1	13-5	4-0	11-0	12-7	10-0	10-1	10-1	10-1
	1889	13-0	14-0	14-0	14-0	11-1	17-1	13-5	4-0	11-0	12-7	10-0	10-1	10-1	10-1
ULSTER.	1880	15-0	15-4	15-1	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1881	14-0	15-0	15-1	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1882	13-0	15-1	15-1	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1883	13-0	15-1	15-1	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1884	13-0	15-1	15-1	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1885	15-4	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1886	14-4	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1887	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1888	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1889	14-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
CONNAUGHT.	1880	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1881	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1882	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1883	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1884	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1885	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1886	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1887	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1888	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
	1889	15-0	15-0	15-0	15-0	15-0	15-0	15-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1

AVERAGE OF IRELAND.

Year.	Wheat.	Oats.	Barley.	Maize.	Rye.	Beans.	Potatoes.	Peas.	Turnips.	Swedes.	Hay.	Straw.	Manure.	Other.
	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.	Cents. per Ton.
1880	15-0	14-0	15-0	14-7	10-8	20-0	15-5	3-0	14-0	14-0	10-0	10-1	10-1	10-1
1881	14-0	14-0	15-0	14-7	10-8	20-0	15-5	3-0	14-0	14-0	10-0	10-1	10-1	10-1
1882	13-0	14-0	15-0	14-7	10-8	20-0	15-5	3-0	14-0	14-0	10-0	10-1	10-1	10-1
1883	13-0	14-0	15-0	14-7	10-8	20-0	15-5	3-0	14-0	14-0	10-0	10-1	10-1	10-1
1884	14-0	14-0	15-0	14-7	10-8	20-0	15-5	3-0	14-0	14-0	10-0	10-1	10-1	10-1
1885	15-4	15-0	15-0	14-1	10-4	22-7	16-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
1886	14-0	15-0	15-0	14-1	10-4	22-7	16-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
1887	15-0	15-0	15-0	14-1	10-4	22-7	16-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
1888	15-0	15-0	15-0	14-1	10-4	22-7	16-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1
1889	15-0	15-0	15-0	14-1	10-4	22-7	16-0	4-0	14-0	14-0	10-0	10-1	10-1	10-1

TABLE II.—Showing the Volume of Bookbinding, and the Quantity of Raw Stock in each Country and Province of January, 1898

28

No. of Binds.	No. of Binds.	No. of Binds.					No. of Binds.	No. of Binds.	No. of Binds.					No. of Binds.	No. of Binds.	No. of Binds.								
		No. of Binds.							No. of Binds.							No. of Binds.								
		Leather.	Half-leather.	Quarter-leather.	Three-quarters-leather.	Other.			Leather.	Half-leather.	Quarter-leather.	Three-quarters-leather.	Other.			Leather.	Half-leather.	Quarter-leather.	Three-quarters-leather.	Other.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21				
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42				
43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63				
64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84				
85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105				
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126				
127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147				
148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168				
169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189				
190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210				
211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231				
232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252				
253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273				
274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294				
295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315				
316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336				
337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357				
358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378				
379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399				
400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420				
421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441				
442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462				
463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483				
484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504				
505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525				
526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546				
547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567				
568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588				
589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609				
610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630				
631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651				
652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672				
673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693				
694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714				
715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735				
736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756				
757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777				
778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798				
799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819				
820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840				
841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861				
862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882				
883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903				
904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924				
925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945				
946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966				
967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987				
988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008				
1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029				
1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050				
1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071				
1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092				
1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113				
1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134				
1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155				
1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176				
1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197				
1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218				
1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239				
1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260				
1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281				
1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302				
1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1							

IT'S ALL IN THE NAME—Bluegrass and Rockabilly are the Quilts of Brent's new Posh Law Union of Larkspur, by 1968.

FROM LAW EXERCISE	Number of Shareholders and Beneficiaries	No. of Returns				No. of Copies				No. of Documents				No. of Books				No. of Periodicals							
		Applied Incomes	Realized and Unrealized	One year old and under one year	Two years	No. of Pages	No. of Issues	With Text	Complete and Incomplete	One year old and under one year	Two years	One year old and under one year	Two years	One year old and under one year	Two years	One year old and under one year	Two years	One year old and under one year	Two years	One year old and under one year	Two years				
Admission	1,417	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066	20,247	961	6,081	10,623	1,249	6,137	16,036	6,645
Admission	1,074	1,074	146	537	774	822	4,242	267	1,090	6,293	7,244	4,922	6,293	22,795	6,842	6,210	9,066</								

[illegible]

Date		Page	
1890	1891	1892	1893
1894	1895	1896	1897
1898	1899	1900	1901
1902	1903	1904	1905
1906	1907	1908	1909
1910	1911	1912	1913
1914	1915	1916	1917
1918	1919	1920	1921
1922	1923	1924	1925
1926	1927	1928	1929
1930	1931	1932	1933
1934	1935	1936	1937
1938	1939	1940	1941
1942	1943	1944	1945
1946	1947	1948	1949
1950	1951	1952	1953
1954	1955	1956	1957
1958	1959	1960	1961
1962	1963	1964	1965
1966	1967	1968	1969
1970	1971	1972	1973
1974	1975	1976	1977
1978	1979	1980	1981
1982	1983	1984	1985
1986	1987	1988	1989
1990	1991	1992	1993
1994	1995	1996	1997
1998	1999	2000	2001
2002	2003	2004	2005
2006	2007	2008	2009
2010	2011	2012	2013
2014	2015	2016	2017
2018	2019	2020	2021
2022	2023	2024	2025
2026	2027	2028	2029
2030	2031	2032	2033
2034	2035	2036	2037
2038	2039	2040	2041
2042	2043	2044	2045
2046	2047	2048	2049
2050	2051	2052	2053
2054	2055	2056	2057
2058	2059	2060	2061
2062	2063	2064	2065
2066	2067	2068	2069
2070	2071	2072	2073
2074	2075	2076	2077
2078	2079	2080	2081
2082	2083	2084	2085
2086	2087	2088	2089
2090	2091	2092	2093
2094	2095	2096	2097
2098	2099	2100	2101
2102	2103	2104	2105
2106	2107	2108	2109
2110	2111	2112	2113
2114	2115	2116	2117
2118	2119	2120	2121
2122	2123	2124	2125
2126	2127	2128	2129
2130	2131	2132	2133
2134	2135	2136	2137
2138	2139	2140	2141
2142	2143	2144	2145
2146	2147	2148	2149
2150	2151	2152	2153
2154	2155	2156	2157
2158	2159	2160	2161
2162	2163	2164	2165
2166	2167	2168	2169
2170	2171	2172	2173
2174	2175	2176	2177
2178	2179	2180	2181
2182	2183	2184	2185
2186	2187	2188	2189
2190	2191	2192	2193
2194	2195	2196	2197
2198	2199	2200	2201
2202	2203	2204	2205
2206	2207	2208	2209
2210	2211	2212	2213
2214	2215	2216	2217
2218	2219	2220	2221
2222	2223	2224	2225
2226	2227	2228	2229
2230	2231	2232	2233
2234	2235	2236	2237
2238	2239	2240	2241
2242	2243	2244	2245
2246	2247	2248	2249
2250	2251	2252	2253
2254	2255	2256	2257
2258	2259	2260	2261
2262	2263	2264	2265
2266	2267	2268	2269
2270	2271	2272	2273

No.	Name of the vessel	Tonnage	No. of Men					No. of Horses	No. of Cattle	No. of Sheep	No. of Pigs	No. of other animals	No. of other animals				
			Infantry	Artillery	Engineers	Medical	Nurses						Infantry	Artillery	Engineers	Medical	Nurses
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	
36																	
37																	
38																	
39																	
40																	
41																	
42																	
43																	
44																	
45																	
46																	
47																	
48																	
49																	
50																	
51																	
52																	
53																	
54																	
55																	
56																	
57																	
58																	
59																	
60																	
61																	
62																	
63																	
64																	
65																	
66																	
67																	
68																	
69																	
70																	
71																	
72																	
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	
81																	
82																	
83																	
84																	
85																	
86																	
87																	
88																	
89																	
90																	
91																	
92																	
93																	
94																	
95																	
96																	
97																	
98																	
99																	
100																	

Table 12.—Number and Names of Vessels and the Quantity of Goods on Board, at the Port of Southampton, in 1861.—continued.

TABLE 13.—SHOWING THE QUANTITY OF LAYE STOCK IN EACH YEAR FROM 1880 TO 1889, BY COUNTRY AND PROVINCE.

COUNTRY.	Year.	No. of Horses.				Mules and Asses.		No. of Cattle.		No. of Sheep.		No. of Pigs.		No. of Goats.	No. of Poultry.
		Year 1880 and onwards.	Year 1881 and onwards.	Year 1882 and onwards.	Year 1883 and onwards.	No. of Horses.	No. of Asses.	Year 1880 and onwards.	Year 1881 and onwards.	Year 1882 and onwards.	Year 1883 and onwards.	Year 1880 and onwards.	Year 1881 and onwards.		
ARIZONA:	1880	57,148	5,365	1,337	145	464	30,895	31,565	82,998	85,438	25,114	8,870	30,108	8,845	407,994
	1881	58,185	5,025	1,492	61	555	78,153	37,808	32,512	34,228	22,029	4,847	41,872	4,847	477,613
	1882	58,815	5,025	1,502	61	555	78,153	37,808	32,512	34,228	22,029	4,847	41,872	4,847	477,613
	1883	58,815	5,025	1,502	61	555	78,153	37,808	32,512	34,228	22,029	4,847	41,872	4,847	477,613
	1884	58,815	5,025	1,502	61	555	78,153	37,808	32,512	34,228	22,029	4,847	41,872	4,847	477,613
	1885	57,184	5,025	1,502	71	561	83,054	34,108	35,720	33,085	23,729	6,470	38,829	6,470	470,828
	1886	58,877	5,025	1,502	29	482	83,054	34,108	35,720	33,085	23,729	6,470	38,829	6,470	470,828
	1887	58,877	5,025	1,502	81	562	84,058	34,108	35,720	33,085	23,729	6,470	38,829	6,470	470,828
	1888	58,877	5,025	1,502	119	611	84,058	34,108	35,720	33,085	23,729	6,470	38,829	6,470	470,828
	1889	58,877	5,025	1,502	129	662	79,254	34,108	35,720	33,085	23,729	6,470	38,829	6,470	470,828
ARIZONA:	1880	12,124	728	888	377	5,168	41,708	15,061	15,892	5,022	4,168	2,729	12,487	8,825	288,828
	1881	12,124	741	765	378	5,154	41,685	15,061	15,892	5,022	4,168	2,729	12,487	8,825	288,828
	1882	12,124	728	888	377	5,168	41,708	15,061	15,892	5,022	4,168	2,729	12,487	8,825	288,828
	1883	12,124	728	888	377	5,168	41,708	15,061	15,892	5,022	4,168	2,729	12,487	8,825	288,828
	1884	12,124	728	888	377	5,168	41,708	15,061	15,892	5,022	4,168	2,729	12,487	8,825	288,828
	1885	12,065	698	987	221	5,791	41,922	19,924	22,568	6,018	5,179	2,879	19,487	5,793	383,276
	1886	12,065	731	948	458	5,859	39,378	21,441	23,628	6,258	5,346	3,042	19,942	5,793	403,288
	1887	12,065	665	948	399	5,765	39,378	21,441	23,628	6,258	5,346	3,042	19,942	5,793	403,288
	1888	12,065	905	947	379	5,698	41,985	19,979	23,627	7,041	5,198	2,898	20,582	5,793	418,944
	1889	12,065	905	983	379	5,625	39,378	20,679	23,628	7,002	5,944	3,359	20,582	5,793	420,779
CALIFORNIA:	1880	8,792	1,263	573	498	5,622	20,211	11,239	10,190	46,088	25,128	1,239	15,738	8,792	171,855
	1881	8,792	1,264	541	474	5,588	22,778	16,835	16,369	37,116	22,981	3,148	18,189	3,339	276,969
	1882	8,792	1,264	541	474	5,588	22,778	16,835	16,369	37,116	22,981	3,148	18,189	3,339	276,969
	1883	8,792	1,264	541	474	5,588	22,778	16,835	16,369	37,116	22,981	3,148	18,189	3,339	276,969
	1884	8,792	1,264	541	474	5,588	22,778	16,835	16,369	37,116	22,981	3,148	18,189	3,339	276,969
	1885	8,792	1,265	1,074	709	5,320	20,585	10,590	15,583	40,219	28,749	2,310	18,649	2,310	317,818
	1886	8,779	1,278	1,108	709	5,280	24,335	11,887	18,994	42,651	28,749	2,725	20,011	2,725	318,818
	1887	8,779	1,278	1,092	642	5,236	24,335	10,988	18,770	40,709	28,712	2,927	22,488	2,927	318,818
	1888	8,779	1,282	1,174	549	5,269	22,687	10,786	18,583	37,719	28,256	3,037	18,634	3,037	317,691
	1889	8,779	1,282	1,233	525	5,279	23,117	10,073	18,543	41,506	23,293	2,981	20,513	2,981	319,763
CANADA:	1880	6,433	1,134	671	1,017	8,047	38,280	21,533	24,240	18,432	8,831	4,281	20,280	18,432	467,435
	1881	6,433	1,134	671	1,017	8,047	38,280	21,533	24,240	18,432	8,831	4,281	20,280	18,432	467,435
	1882	6,433	1,134	671	1,017	8,047	38,280	21,533	24,240	18,432	8,831	4,281	20,280	18,432	467,435
	1883	6,433	1,134	671	1,017	8,047	38,280	21,533	24,240	18,432	8,831	4,281	20,280	18,432	467,435
	1884	6,433	1,134	671	1,017	8,047	38,280	21,533	24,240	18,432	8,831	4,281	20,280	18,432	467,435
	1885	6,433	1,027	928	1,168	7,748	40,380	20,495	30,812	1,515	6,428	3,388	18,888	18,888	467,264
	1886	6,433	1,028	1,285	1,137	7,944	40,380	20,495	30,812	1,515	6,428	3,388	18,888	18,888	467,264
	1887	6,433	1,028	1,092	1,137	7,944	40,380	20,495	30,812	1,515	6,428	3,388	18,888	18,888	467,264
	1888	6,433	1,028	1,092	1,137	7,944	40,380	20,495	30,812	1,515	6,428	3,388	18,888	18,888	467,264
	1889	6,433	1,028	1,092	1,137	7,944	40,380	20,495	30,812	1,515	6,428	3,388	18,888	18,888	467,264
CANADA:	1880	12,108	2,536	1,851	418	18,385	25,471	86,088	37,551	74,305	40,524	4,925	55,627	14,931	457,528
	1881	11,703	2,161	1,638	494	5,895	33,485	34,186	36,656	85,522	35,225	4,158	34,693	14,931	425,078
	1882	11,703	2,161	1,638	494	5,895	33,485	34,186	36,656	85,522	35,225	4,158	34,693	14,931	425,078
	1883	11,703	2,161	1,638	494	5,895	33,485	34,186	36,656	85,522	35,225	4,158	34,693	14,931	425,078
	1884	11,703	2,161	1,638	494	5,895	33,485	34,186	36,656	85,522	35,225	4,158	34,693	14,931	425,078
	1885	11,703	2,536	2,023	496	5,735	38,585	35,787	41,103	25,079	32,121	5,882	36,884	14,115	411,686
	1886	11,703	2,536	2,023	496	5,735	38,585	35,787	41,103	25,079	32,121	5,882	36,884	14,115	411,686
	1887	12,068	2,536	2,023	703	10,032	40,535	37,185	43,495	27,036	33,769	6,884	44,321	14,115	409,964
	1888	12,067	2,536	2,023	703	10,032	40,535	37,185	43,495	27,036	33,769	6,884	44,321	14,115	409,964
	1889	12,134	3,129	2,644	738	10,061	40,241	37,879	44,473	27,068	32,367	6,884	44,321	14,115	411,686
CANADA:	1880	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1881	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1882	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1883	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1884	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1885	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1886	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1887	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1888	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1889	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
CANADA:	1880	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1881	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1882	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1883	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1884	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1885	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1886	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1887	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1888	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,118	23,265	1,150,967
	1889	20,737	3,733	3,049	1,762	10,739	210,295	87,899	64,948	74,654	120,019	18,881	108,1		

TABLE 13.—SHOWING THE QUANTITY OF LIVE STOCK IN EACH YEAR FROM 1880 TO 1889, BY COUNTIES AND PROVINCES—continued.

COUNTIES.	Years.	No. of HORSES.			MULLEN AND ASHES.		No. of CATTLE.			No. of SHEEP.		No. of PIGS.		No. of Cattle.	No. of Pigs.
		One year old and upwards.	Two years old and upwards.	Under two years.	No. of Males.	No. of Females.	One year old and upwards.	Two years old and upwards.	Under two years.	One year old and upwards.	Under two years.	One year old and upwards.	Under two years.		
DORSET:	1880	10,620	1,814	594	823	1,284	35,100	10,800	6,914	40,820	18,814	1,092	10,808	5,400	226,238
	1881	10,770	1,259	674	391	1,881	41,277	9,840	6,406	32,000	16,941	1,091	12,270	5,307	226,818
	1882	10,700	1,044	608	340	1,860	42,603	10,180	6,818	33,470	18,722	1,091	14,205	4,701	221,426
	1883	10,840	1,080	548	331	1,909	43,810	10,600	7,174	33,547	18,825	1,090	13,014	4,681	221,426
	1884	10,007	960	596	304	2,037	44,310	10,000	8,432	34,000	18,075	1,088	13,001	4,600	220,100
	1885	10,841	1,136	730	362	1,849	43,001	12,220	8,130	31,300	20,411	1,092	10,874	4,840	221,322
	1886	10,127	1,009	744	360	1,849	44,904	12,740	8,240	32,511	12,207	1,092	9,145	4,090	221,472
	1887	10,166	1,066	684	358	1,705	45,110	10,900	7,607	31,100	16,851	1,040	10,186	4,100	216,566
	1888	10,217	1,058	707	350	1,845	41,770	11,001	8,000	32,610	16,330	980	9,094	4,200	221,433
	1889	10,454	1,237	730	342	1,964	45,410	10,640	7,901	34,510	20,041	1,020	9,340	4,400	224,010
DURHAM:	1880	6,120	705	463	154	4,067	55,854	14,784	20,700	4,000	4,173	1,800	11,100	4,580	511,010
	1881	6,043	543	364	125	4,068	55,070	15,010	20,100	3,000	3,254	1,800	14,010	4,440	509,970
	1882	6,004	800	400	150	3,072	52,000	15,000	27,204	3,610	2,000	2,740	20,000	4,200	500,020
	1883	6,000	800	422	150	4,200	51,000	15,001	27,001	4,010	2,000	3,400	20,000	4,100	500,020
	1884	6,217	800	443	151	3,041	51,220	15,000	27,000	3,000	3,000	3,400	19,000	4,010	500,020
	1885	5,570	411	418	140	3,040	51,700	15,000	27,000	4,410	3,000	2,700	20,000	3,720	501,000
	1886	5,700	400	472	140	4,000	52,754	14,600	26,101	4,100	3,074	2,400	16,700	3,900	500,000
	1887	5,910	403	514	141	3,100	54,172	14,470	26,110	3,000	3,000	3,400	20,000	4,100	500,000
	1888	6,000	620	512	141	3,000	54,000	14,400	27,000	3,000	3,000	3,400	21,772	4,200	500,000
	1889	6,240	671	560	134	4,000	55,000	15,000	27,000	3,000	3,000	3,400	22,000	4,300	485,100
GALWAY:	1880	18,540	4,870	4,470	1,020	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1881	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1882	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1883	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1884	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1885	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1886	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1887	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1888	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
	1889	18,400	4,800	4,500	1,000	16,000	68,500	37,300	23,700	30,100	17,000	4,500	30,000	10,700	700,000
KERRY:	1880	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1881	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1882	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1883	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1884	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1885	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1886	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1887	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1888	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
	1889	11,300	3,800	1,000	2,360	8,000	120,000	31,000	43,400	60,000	20,000	5,000	30,000	22,000	400,000
KILDEARE:	1880	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1881	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1882	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1883	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1884	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1885	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1886	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1887	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1888	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1889	9,000	3,500	1,000	400	4,000	35,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
KILKENNY:	1880	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1881	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1882	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1883	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1884	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1885	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1886	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1887	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1888	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1889	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
LIMERICK:	1880	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1881	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1882	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1883	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1884	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1885	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1886	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1887	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,000
	1888	10,000	3,000	1,000	1,000	4,000	40,000	10,000	10,000	40,000	10,000	1,000	10,000	3,000	200,

TABLE 13.—SHOWING THE QUANTITY OF LIVE STOCK IN EACH YEAR FROM 1890 TO 1899, BY COUNTRY AND PROVINCE—continued.

COUNTRY.	Year.	No. of Horses.			Mules and Asses.			No. of Cattle.			No. of Sheep.			No. of Pigs.			No. of Goats.	No. of Buffaloes.
		Two years and over.	One year and under.	Under one year.	No. of Horses.	No. of Asses.	Two years and over.	One year and under.	Under one year.	Two years and over.	One year and under.	Under one year.	Two years and over.	One year and under.	Under one year.	Two years and over.		
Boschman : Area, 565,407 Acres.	1890	3,145	1,951	1,581	1,864	8,884	35,721	24,725	18,894	105,319	45,984	2,965	10,915	10,970	442,888			
	1891	3,665	2,547	1,854	1,935	9,315	38,840	26,120	19,398	119,365	47,955	4,055	11,152	10,541	446,875			
	1892	3,891	2,718	1,954	1,966	9,515	39,894	27,578	20,308	123,415	49,575	4,596	11,545	11,345	450,728			
	1893	4,052	2,847	2,040	1,886	9,871	40,787	28,737	21,852	127,811	51,260	5,098	11,937	11,645	454,753			
	1894	4,202	2,947	2,140	1,884	9,997	41,529	29,529	22,518	131,845	52,936	5,598	12,326	12,034	458,788			
	1895	4,778	3,558	2,340	1,981	9,505	46,087	28,765	23,611	137,136	53,719	5,920	13,036	12,738	477,774			
	1896	5,050	3,618	2,440	1,981	9,495	50,248	28,770	25,051	144,820	55,173	5,471	13,736	13,246	479,660			
	1897	5,054	3,618	2,440	1,981	9,495	50,248	28,770	25,051	144,820	55,173	5,471	13,736	13,246	479,660			
	1898	5,052	3,618	2,440	1,981	9,495	50,248	28,770	25,051	144,820	55,173	5,471	13,736	13,246	479,660			
	1899	5,102	3,618	2,440	1,981	9,495	50,248	28,770	25,051	144,820	55,173	5,471	13,736	13,246	479,660			
Somo : Area, 451,125 Acres.	1890	5,773	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1891	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1892	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1893	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1894	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1895	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1896	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1897	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1898	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
	1899	5,760	3,722	2,581	2,781	7,815	45,061	27,660	20,195	127,553	53,596	5,627	13,674	13,175	485,884			
Tobacco : Area, 1,048,568 Acres.	1890	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1891	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1892	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1893	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1894	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1895	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1896	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1897	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1898	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
	1899	10,562	4,537	3,042	1,521	13,528	137,568	105,244	43,474	143,001	92,038	6,185	14,688	13,555	507,860			
Tobacco : Area, 775,548 Acres.	1890	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1891	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1892	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1893	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1894	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1895	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1896	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1897	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1898	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
	1899	12,647	1,064	1,560	70	1,001	14,720	12,575	41,818	26,535	17,584	8,205	17,584	16,584	611,742			
Waterbury : Area, 455,194 Acres.	1890	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1891	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1892	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1893	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1894	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1895	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1896	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1897	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1898	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1899	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
Waterbury : Area, 654,977 Acres.	1890	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1891	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1892	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1893	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1894	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1895	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1896	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1897	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1898	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1899	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
Waterbury : Area, 575,768 Acres.	1890	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1891	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			
	1892	6,064	1,710	1,255	65	4,332	10,503	10,503	32,748	37,424	22,556	4,825	10,855	5,125	371,882			

TABLE 13.—SHOWING THE QUANTITY OF LIVE STOCK IN EACH YEAR FROM 1880 TO 1888, BY COUNTIES AND PROVINCES—continued.

PROVINCES.

PROVINCE.	Year.	No. of Horses.			Mules and Asses.		No. of Cattle.			No. of Swine.		No. of Pigs.		No. of Sheep.		No. of Goats.	
		Two years old and upwards.	One year old and under two years.	Under one year.	No. of Males.	No. of Females.	Two years old and upwards.	One year old and under two years.	Under one year.	Two years old and upwards.	Under one year.	Two years old and upwards.	Under one year.	Two years old and upwards.	Under one year.	No. of Males.	No. of Females.
Leinster.	1880	120,567	24,178	17,513	8,172	42,374	597,535	251,097	158,488	374,181	447,003	30,247	188,515	67,485	1,563,817		
	1881	124,379	24,588	16,700	8,208	42,484	613,631	227,229	171,967	378,134	254,556	34,714	248,830	67,731	1,608,070		
	1882	129,842	21,480	17,584	8,577	40,709	602,382	221,515	178,097	365,535	263,070	40,264	217,728	63,564	1,599,380		
	1883	127,374	21,437	17,904	8,472	40,895	625,730	231,514	181,949	397,504	414,637	39,745	268,456	63,371	1,595,320		
	1884	130,547	20,008	19,785	8,608	40,709	645,630	230,000	186,542	703,269	618,357	36,608	284,545	60,387	1,597,375		
	1885	128,901	20,002	20,562	8,738	40,638	644,395	229,646	188,542	724,851	676,744	34,867	271,539	61,705	1,592,265		
	1886	124,187	21,567	20,749	8,652	40,254	649,540	247,083	177,808	603,816	608,519	34,484	284,479	60,380	1,579,126		
	1887	127,747	20,732	21,561	8,983	40,708	642,333	247,581	184,985	605,407	622,177	39,486	292,008	60,728	1,623,671		
	1888	129,428	20,287	22,710	9,101	40,413	616,817	238,188	176,284	704,116	614,394	39,020	274,441	70,705	1,629,354		
	1889	129,787	20,048	23,008	9,412	40,316	622,698	247,401	187,274	740,002	671,143	38,374	292,758	73,764	1,684,445		
Munster.	1880	168,467	35,611	25,009	8,709	43,870	749,025	224,179	218,978	874,412	921,080	47,186	297,789	88,183	1,836,881		
	1881	185,224	30,042	26,729	8,410	34,471	745,087	220,489	207,768	878,887	980,177	76,627	345,023	83,543	1,841,030		
	1882	184,008	16,354	24,587	8,444	35,282	727,089	218,184	202,952	848,487	907,205	70,611	320,000	80,486	1,838,708		
	1883	182,881	15,086	25,009	8,708	36,182	720,860	210,965	207,168	857,489	904,481	72,801	320,000	80,486	1,838,708		
	1884	184,965	15,062	25,648	8,410	35,005	739,149	248,128	254,270	876,373	930,321	61,489	300,561	79,373	1,860,683		
	1885	186,817	15,485	26,079	8,901	36,112	735,595	244,280	241,280	897,907	963,880	57,219	308,192	74,372	1,868,724		
	1886	180,017	16,041	26,171	8,608	36,008	742,002	246,347	246,347	874,017	935,880	54,371	304,479	80,320	1,837,268		
	1887	181,712	16,108	26,541	8,808	36,008	745,419	247,000	241,411	871,000	936,544	54,371	304,479	80,320	1,837,268		
	1888	180,601	21,267	26,448	11,403	36,008	747,734	247,000	241,411	871,000	936,544	54,371	304,479	80,320	1,837,268		
	1889	181,738	21,406	26,848	11,403	36,008	747,734	247,000	241,411	871,000	936,544	54,371	304,479	80,320	1,837,268		
Ulster.	1880	122,474	22,000	17,517	2,255	22,998	578,908	226,541	249,332	343,208	155,014	20,348	147,911	73,612	1,743,871		
	1881	139,408	10,747	18,042	2,304	22,919	615,207	214,420	250,686	322,130	141,507	25,465	151,816	71,402	1,800,779		
	1882	144,801	9,904	14,817	2,202	22,919	615,207	214,420	250,686	322,130	141,507	25,465	151,816	71,402	1,800,779		
	1883	144,411	9,920	15,791	2,202	22,919	615,207	214,420	250,686	322,130	141,507	25,465	151,816	71,402	1,800,779		
	1884	144,782	9,900	17,738	2,419	23,279	561,400	245,007	245,540	304,137	150,763	43,868	204,846	72,364	1,867,200		
	1885	143,828	10,568	19,113	2,379	24,544	566,400	245,540	245,540	304,137	150,763	43,868	204,846	72,364	1,867,200		
	1886	143,049	10,530	18,977	2,381	24,544	566,400	245,540	245,540	304,137	150,763	43,868	204,846	72,364	1,867,200		
	1887	147,384	10,700	19,785	2,420	24,544	566,400	245,540	245,540	304,137	150,763	43,868	204,846	72,364	1,867,200		
	1888	148,440	11,748	14,227	2,420	24,544	566,400	245,540	245,540	304,137	150,763	43,868	204,846	72,364	1,867,200		
	1889	151,474	12,007	15,845	2,440	24,544	566,400	245,540	245,540	304,137	150,763	43,868	204,846	72,364	1,867,200		
Connaught.	1880	46,883	18,471	9,740	5,804	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1881	47,072	18,228	9,716	6,019	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1882	46,182	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1883	46,883	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1884	46,883	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1885	46,883	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1886	46,883	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1887	46,883	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1888	46,883	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		
	1889	46,883	18,000	10,080	6,042	58,053	345,760	226,681	187,647	714,007	839,173	15,460	123,187	37,000	1,425,712		

TOTAL OF IRELAND.

IRELAND.	Year.	No. of Horses.			Mules and Asses.		No. of Cattle.			No. of Swine.		No. of Pigs.		No. of Sheep.		No. of Goats.	
		Two years old and upwards.	One year old and under two years.	Under one year.	No. of Males.	No. of Females.	Two years old and upwards.	One year old and under two years.	Under one year.	Two years old and upwards.	Under one year.	Two years old and upwards.	Under one year.	Two years old and upwards.	Under one year.	No. of Males.	No. of Females.
TOTAL OF IRELAND.	1880	638,777	127,871	100,801	34,001	180,877	3,031,808	918,004	610,488	8,000,744	1,366,773	111,111	594,888	268,889	1,636,123		
	1881	684,379	120,888	107,960	34,200	181,145	3,101,632	790,748	677,248	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1882	681,381	95,000	104,118	34,400	182,783	3,045,615	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1883	673,320	96,645	103,807	34,600	183,107	3,031,808	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1884	673,320	96,645	103,807	34,600	183,107	3,031,808	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1885	673,320	96,645	103,807	34,600	183,107	3,031,808	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1886	673,320	96,645	103,807	34,600	183,107	3,031,808	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1887	673,320	96,645	103,807	34,600	183,107	3,031,808	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1888	673,320	96,645	103,807	34,600	183,107	3,031,808	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		
	1889	673,320	96,645	103,807	34,600	183,107	3,031,808	782,001	610,301	8,000,744	1,366,773	148,195	606,120	268,889	1,636,123		

TABLE 14.—SHOWING, by COUNTIES and PROVINCES, the Total Area under POTATOES in 1889, and the Extent in Statute Acres under each description of that crop.

COUNTIES.	Total extent under Potatoes in Statute Acres.	GENERAL NAMES OF THE DIFFERENT KINDS OF POTATOES PLANTED.																All others.
		Champion.	Providence.	Early Main.	White No. 1.	King of the Mountains.	South Devon.	Keefe.	Orleans.	Dragon Backs.	American Backs.	American Whites.	Leather Collar.	Red Backs.	Queen Tops.			
ARMAGH, ...	42,372	22,475	412	4,500	490	2,119	217	294	1,328	27	845	18	.	48	.	.	626	
ARMAGH, ...	22,574	26,284	1,238	2,809	658	761	338	211	84	.	272	.	.	.	.	.	308	
CARLOW, ...	8,549	3,327	308	9	92	31	195	180	.	.	15	.	.	.	.	.	23	
CAYNE, ...	27,963	54,173	2,697	294	839	18	210	178	.	.	27	.	.	.	.	.	24	
CLARE, ...	25,880	23,074	2,302	601	718	2	374	174	.	.	98	11	275	.	.	.	479	
CO. . . .	62,904	56,024	2,928	108	454	.	170	219	.	.	.	.	.	.	.	.	682	
DONOGAL, ...	44,979	30,261	2,615	1,549	2,708	1,118	213	331	118	212	93	235	.	7	.	.	2,455	
DOW, ...	47,733	28,854	2,132	5,858	748	1,737	497	301	725	.	295	.	.	.	.	.	428	
DUBLIN, ...	5,826	8,709	396	61	279	181	134	1,819	.	.	6	.	.	.	.	.	22	
FERRISBURGH, ...	15,725	12,638	1,785	529	273	2	45	40	.	2	.	.	.	.	.	.	29	
GALWAY, ...	43,351	27,330	8,400	248	678	2	283	802	.	.	18	.	.	.	58	.	689	
KERRY, ...	28,777	24,834	2,108	229	614	.	149	194	.	.	.	.	19	.	.	.	329	
KILDEARE, ...	8,129	5,784	698	61	128	39	134	302	.	.	17	.	.	.	.	.	31	
KILKENNY, ...	16,382	18,843	1,240	21	114	2	279	28	.	.	11	.	.	.	.	.	35	
KIN, ...	16,487	12,665	1,319	92	909	8	492	269	.	.	85	.	.	.	.	.	78	
LEITH, ...	15,904	14,167	1,583	475	877	1	87	58	.	.	14	.	.	2	.	.	34	
LIMERICK, ...	26,823	15,825	2,184	184	316	.	88	66	.	.	5	.	24	.	.	.	6	
LONDONDERRY, ...	51,722	18,789	1,480	2,685	1,708	1,373	541	484	217	478	219	182	.	90	.	.	2,475	
LONDONDERRY, ...	16,589	2,323	1,049	90	101	2	198	59	.	.	84	.	.	.	.	.	11	
LOUTH and DOWN, County of Town.	11,545	9,969	1,028	270	290	878	142	244	.	.	1	.	.	4	.	.	34	
MAYO, ...	46,267	42,958	8,400	240	559	8	104	111	.	.	2	.	.	.	.	.	461	
MEATH, ...	17,192	8,474	632	68	103	27	811	345	.	.	82	.	.	2	.	.	89	
MONAGHAN, ...	22,928	15,170	2,208	895	320	.	22	46	.	.	8	.	.	51	.	.	22	
QUEEN'S, ...	15,261	18,469	1,261	34	179	11	470	206	.	.	18	.	.	16	.	.	34	
ROSCOMMON, ...	23,667	21,236	5,412	229	290	76	112	307	.	.	22	.	.	.	.	.	129	
SLEIGH, ...	18,322	16,659	1,658	217	265	8	128	184	.	.	1	.	.	.	.	.	109	
TIPPERARY, ...	21,865	25,224	2,792	136	294	8	169	117	.	.	10	.	14	8	.	.	121	
TYRONE, ...	41,591	23,727	1,494	2,875	1,965	492	371	226	15	411	191	27	.	25	.	.	2,068	
WATERFORD, ...	14,640	12,557	698	17	79	1	84	78	.	.	1	.	.	.	.	.	25	
WEXFORD, ...	16,735	8,744	1,173	115	115	10	227	327	.	.	26	.	.	1	8	.	21	
WICK, ...	22,430	19,754	1,389	61	280	18	647	218	.	.	11	.	.	.	.	.	128	
WICKLOW, ...	20,373	9,124	353	35	80	81	93	426	.	.	10	.	.	.	.	.	21	
PROVINCES.																		
LEINSTER, ...	181,856	127,724	11,563	947	2,127	838	5,253	4,254	.	.	282	.	.	17	8	.	484	
MUNSTER, ...	189,178	138,643	14,125	1,084	2,204	8	1,035	778	.	.	43	11	235	8	.	.	1,739	
ULSTER, ...	302,930	236,543	20,082	28,873	9,168	14,294	5,174	2,187	2,451	1,581	1,227	829	.	141	.	.	15,695	
CONSTITUTION	122,581	122,886	12,623	1,594	2,263	81	621	712	.	.	82	.	.	2	80	.	1,547	
Total of Ireland, 1889, ...	797,344	625,900	60,180	29,708	16,185	14,265	8,460	8,809	2,451	1,581	1,214	829	230	185	91	.	23,485	
Percentage in 1889, ...	100.0	78.2	7.4	3.7	2.0	1.8	1.1	1.1	0.3	0.2	0.2	0.1	0.03	0.02	0.01	.	2.9	
Total of Ireland, 1885, ...	804,810	620,426	56,369	33,589	17,710	16,688	8,640	8,294	2,659	1,817	1,226	849	270	170	85	.	23,680	
Percentage in 1885, ...	100.0	77.1	7.0	4.2	2.2	2.1	1.2	1.0	0.3	0.2	0.2	0.1	0.03	0.02	0.01	.	2.9	

TABLE 13.—SHOWING, by POOR LAW UNIONS, the Total extent in STATUTE ACRES under POTATOES in 1889, and the extent under each description of that Crop.

POOR LAW UNIONS.	Total extent under Potatoes in Statute Acres.	Extent under																All others.
		Champion.	Flounders.	Scary Moss.	White Racco.	No grass Down.	Scrub Down.	Knap.	Croft.	Scrub Down.	Arable Down.	Arable Down.	Arable Down.	Arable Down.	Arable Down.	Arable Down.		
Alkington.	3,073	4,435	485	1	88	10	39	12	7	222	27	11	83	13	16	10	3	
Arnsby.	1,788	4,374	86	1,230	175	312	28	7	222	27	11	83	13	16	10	3	385	
Arnsby.	3,134	5,479	369	94	127	46	46	68	1	1	1	1	1	1	1	1	8	
Arnsby.	12,523	9,766	1,117	1,652	157	13	121	115	16	70	70	70	70	70	70	70	164	
Arnsby.	4,344	4,122	351	81	738	1	71	42	1	1	1	1	1	1	1	1	3	
Ald.	4,698	3,035	340	32	86	168	165	1	1	1	1	1	1	1	1	1	3	
Ald.	4,303	3,912	234	30	27	21	29	1	1	1	1	1	1	1	1	1	29	
Ballynath.	6,276	8,249	487	15	14	24	2	1	1	1	1	1	1	1	1	1	66	
Ballynath.	3,665	3,920	419	16	30	87	17	1	1	1	1	1	1	1	1	1	25	
Ballynath.	3,339	4,788	362	6	49	1	15	15	1	1	1	1	1	1	1	1	49	
Ballynath.	4,138	3,211	190	464	9	205	30	65	70	1	1	1	1	1	1	1	373	
Ballynath.	3,814	2,710	396	6	56	22	8	1	1	1	1	1	1	1	1	1	1	
Ballynath.	21,302	2,160	190	1,356	169	347	20	145	44	1	1	1	1	1	1	1	2,639	
Ballynath.	3,763	3,393	112	797	29	921	16	47	85	1	1	1	1	1	1	1	2,645	
Ballynath.	3,808	3,690	385	172	225	3	37	15	1	1	1	1	1	1	1	1	10	
Ballynath.	312	483	108	4	1	1	1	1	1	1	1	1	1	1	1	1	20	
Ballynath.	3,312	3,330	173	17	126	90	78	93	1	1	1	1	1	1	1	1	1	
Ballynath.	3,496	3,944	173	24	72	49	164	1	1	1	1	1	1	1	1	1	77	
Ballynath.	3,849	3,380	403	1,171	174	304	115	23	163	1	1	1	1	1	1	1	1	
Ballynath.	3,704	3,995	133	14	1	1	1	1	1	1	1	1	1	1	1	1	44	
Ballynath.	2,136	2,207	64	1	33	1	1	1	1	1	1	1	1	1	1	1	50	
Ballynath.	4,543	3,794	333	345	44	1	14	1	1	1	1	1	1	1	1	1	1	
Ballynath.	2,712	3,064	49	469	13	115	37	20	171	1	1	1	1	1	1	1	20	
Ballynath.	2,397	2,933	934	3	141	28	8	1	1	1	1	1	1	1	1	1	157	
Ballynath.	2,244	1,891	342	8	52	1	26	8	1	1	1	1	1	1	1	1	1	
Ballynath.	7,732	3,637	636	81	119	1	87	14	1	1	1	1	1	1	1	1	113	
Ballynath.	4,955	3,437	254	85	50	1	8	79	1	1	1	1	1	1	1	1	128	
Ballynath.	5,731	5,418	271	6	34	1	47	14	1	1	1	1	1	1	1	1	1	
Ballynath.	7,186	5,149	8	546	39	163	133	1	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1	15	13	1	1	1	1	1	1	1	1	1	
Ballynath.	4,731	3,952	634	193	39	1	1	1	1	1	1	1	1	1	1	1	1	
Ballynath.	3,286	4,614	453	136	30	1</												

TABLE 15.—SHOWING, by POOR LAW UNIONS, the Total extent in STATUTE ACRES under POTATOES in 1889, and the extent under each description of that Crop—continued.

POOR LAW UNIONS.	Total extent under Potatoes in statute Acres.	Extent under																
		Champion.	Flourish.	Sherry Park.	White Rocks.	Magnum Bonum.	South Devon.	Keweenaw.	Crofton.	Beacon.	American.	American.	American.	Leather.	Red Rocks.	Green Type.	All others.	
Gwynedd, ...	6,926	8,274	477	35	19	129	23	23	23	23	23	23	23	23	23	23	23	
Isle of Man, ...	7,942	5,115	641	476	306	44	87	60	7	205	4	504	4	4	4	4	4	
Irishmen, ...	3,547	2,895	603	106	0	0	80	34	0	0	0	0	0	0	0	0	0	
Kentish, ...	4,450	8,957	491	9	10	0	85	51	0	0	0	0	0	0	0	0	0	
Kells, ...	8,365	2,934	365	11	20	5	55	34	0	0	0	0	0	0	0	0	0	
Keweenaw, ...	8,145	2,880	30	10	1	1,350	4	54	15	0	0	0	0	0	0	0	0	
Killesh, ...	8,043	2,647	333	321	1	0	22	2	0	0	0	0	0	0	0	0	0	
Killesh, ...	8,774	8,653	350	4	47	0	72	2	0	0	0	0	0	0	0	0	0	
Killesh, ...	8,142	1,683	175	23	75	2	42	41	0	0	0	0	0	0	0	0	0	
Killesh, ...	8,140	1,055	171	24	40	0	74	4	0	0	0	0	0	0	0	0	0	
Killesh, ...	8,487	4,983	482	39	59	0	53	29	0	0	0	0	0	0	0	0	0	
Killesh, ...	1,507	1,507	144	0	0	0	7	0	0	0	0	0	0	0	0	0	0	
Killesh, ...	4,670	3,987	380	16	41	0	0	10	0	0	0	0	0	0	0	0	0	
Killesh, ...	8,787	4,117	474	109	415	0	241	103	0	0	0	0	0	0	0	0	0	
Killesh, ...	8,173	2,750	335	17	27	0	0	17	0	0	0	0	0	0	0	0	0	
Lane, ...	8,267	3,857	156	915	172	160	97	31	259	0	0	0	0	0	0	0	0	
Lane, ...	8,344	2,855	207	150	179	160	20	10	0	114	0	15	0	0	0	0	0	
Lane, ...	7,299	4,145	366	630	310	514	179	142	36	115	0	0	0	0	0	0	0	
Lane, ...	8,245	4,550	805	30	30	0	0	10	0	0	0	0	0	0	0	0	0	
Lane, ...	8,363	8,265	472	1,872	98	687	49	36	304	0	0	0	0	0	0	0	0	
Lane, ...	8,475	3,254	154	0	0	0	0	17	0	0	0	0	0	0	0	0	0	
Lane, ...	4,393	3,422	205	200	40	0	0	4	0	0	0	0	0	0	0	0	0	
Lane, ...	8,712	4,217	445	89	91	0	25	0	0	0	0	0	0	0	0	0	0	
Lane, ...	7,757	3,854	545	310	759	485	169	129	167	566	14	0	0	0	0	0	0	
Lane, ...	4,584	4,384	182	46	110	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	4,394	3,527	280	10	11	0	4	12	0	0	0	0	0	0	0	0	0	
Lane, ...	7,553	4,431	630	1,021	569	606	266	110	69	161	0	0	0	0	0	0	0	
Lane, ...	4,716	4,630	247	10	82	0	0	1	0	0	0	0	0	0	0	0	0	
Lane, ...	19,019	2,939	795	1,182	265	445	111	115	80	194	117	0	0	0	0	0	0	
Lane, ...	8,340	3,655	584	5	34	0	13	40	0	0	0	0	0	0	0	0	0	
Lane, ...	4,553	4,134	567	185	32	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	4,190	5,660	8,06	12	14	0	21	42	0	0	0	0	0	0	0	0	0	
Lane, ...	8,873	4,364	321	289	265	149	55	42	0	162	11	0	0	0	0	0	0	
Lane, ...	8,816	2,446	96	0	79	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	8,674	3,306	347	5	17	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	8,814	4,375	372	123	168	0	46	21	0	19	0	0	0	0	0	0	0	
Lane, ...	8,587	4,718	761	389	147	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	8,230	3,163	245	0	0	0	118	38	0	0	0	0	0	0	0	0	0	
Lane, ...	7,869	4,401	558	26	84	0	38	46	0	0	0	0	0	0	0	0	0	
Lane, ...	4,467	3,770	488	43	58	0	70	43	0	18	0	0	0	0	0	0	0	
Lane, ...	2,676	3,100	254	26	44	0	70	170	0	0	0	0	0	0	0	0	0	
Lane, ...	1,633	1,564	143	25	27	14	35	34	0	0	0	0	0	0	0	0	0	
Lane, ...	5,441	4,225	378	19	17	0	19	13	0	0	0	0	0	0	0	0	0	
Lane, ...	8,578	4,577	417	29	58	0	22	25	0	0	0	0	0	0	0	0	0	
Lane, ...	7,560	6,761	479	13	156	0	251	26	0	0	0	0	0	0	0	0	0	
Lane, ...	10,342	7,925	730	383	168	707	66	26	10	167	0	0	0	0	0	0	0	
Lane, ...	6,950	8,347	273	1,361	149	1,038	68	23	235	0	0	0	0	0	0	0	0	
Lane, ...	3,768	8,230	341	6	58	0	60	16	0	0	0	0	0	0	0	0	0	
Lane, ...	16,445	7,690	692	602	574	40	58	5	0	44	19	0	0	0	0	0	0	
Lane, ...	8,192	3,054	182	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	8,544	5,630	593	47	160	0	202	82	0	94	0	0	0	0	0	0	0	
Lane, ...	2,684	1,702	218	5	30	0	0	9	0	15	0	0	0	0	0	0	0	
Lane, ...	1,890	596	89	4	69	41	42	190	0	0	0	0	0	0	0	0	0	
Lane, ...	4,279	3,444	170	12	9	41	38	236	0	0	0	0	0	0	0	0	0	
Lane, ...	5,734	3,849	225	15	40	0	11	0	0	0	0	0	0	0	0	0	0	
Lane, ...	1,231	3,029	474	31	22	0	29	4	0	0	0	0	0	0	0	0	0	
Lane, ...	4,167	8,478	356	12	46	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	2,555	2,129	251	55	45	4	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	8,698	3,745	164	3	17	12	10	69	0	0	0	0	0	0	0	0	0	
Lane, ...	4,599	4,033	285	3	23	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	1,534	1,781	47	1	17	0	1	0	0	0	0	0	0	0	0	0	0	
Lane, ...	6,134	5,131	667	149	136	0	35	16	0	0	0	0	0	0	0	0	0	
Lane, ...	8,139	5,534	858	849	601	602	105	105	0	634	26	11	0	0	0	0	0	
Lane, ...	4,133	3,447	221	114	203	69	53	22	0	18	0	0	0	0	0	0	0	
Lane, ...	8,569	8,344	546	16	55	4	17	23	0	4	0	0	0	0	0	0	0	
Lane, ...	16,577	5,862	771	69	38	0	42	38	0	0	0	0	0	0	0	0	0	
Lane, ...	3,376	2,929	285	13	19	0	35	13	0	0	0	0	0	0	0	0	0	
Lane, ...	3,232	4,235	415	8	24	1	1	59	0	0	0	0	0	0	0	0	0	
Lane, ...	8,699	5,277	455	8	45	1	15	16	0	0	0	0	0	0	0	0	0	
Lane, ...	4,109	4,565	306	17	45	0	38	27	0	0	0	0	0	0	0	0	0	
Lane, ...	6,534	8,267	371	17	203	0	37	46	0	0	0	0	0	0	0	0	0	
Lane, ...	2,938	1,845	36	4	31	0	185	108	0	0	0	0	0	0	0	0	0	
Lane, ...	8,317	7,598	666	84	107	0	29	41	0	0	0	0	0	0	0	0	0	
Lane, ...	5,420	2,142	228	11	6	0	9	0	0	0	0	0	0	0	0	0	0	
Lane, ...	4,969	4,952	376	6	36	6	120	51	0	18	0	0	0	0	0	0	0	
Lane, ...	5,000	2,007	291	0	6	0	54	4	0	0	0	0	0	0	0	0	0	
Lane, ...	2,993	4,554	331	3	12	0	1	37	0	0	0	0	0	0	0	0	0	
Lane, ...	7,003	8,156	390	36	316	0	0	0	0	0	0	0	0	0	0	0	0	
Lane, ...	6,013	4,272	256	10	0	0	265	48	0	0	0	0	0	0	0	0	0	
Lane, ...	2,701	2,529	165	0	25	0	27	29	0	0	0	0	0	0	0	0	0	
Total, ...	787,234	625,692	58,100	25,780	15,780	15,780	6,402	9,098	9,098	1,453	1,714	333	326	265	81	13,407		

TABLE 16.—SHOWING, by COUNTY, the average rate of Produce per statute acre of the principal descriptions of POTATOES planted in Ireland in 1882.

COUNTIES.	GENERAL NAMES OF THE DIFFERENT KINDS OF POTATOES PLANTED IN EACH COUNTY.														
	Champion.	Flourish.	Early Irish.	White Irish.	Native Irish.	Spanish.	King's.	Queen's.	Queen's.	Queen's.	Queen's.	Queen's.	Queen's.	Queen's.	Queen's.
	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.
ARLUND, . . .	78	71	65	67	69	68	68	70	67	64	64	64	64	64	64
ARMAGH, . . .	67	60	57	57	58	64	69	62	62	60	60	60	60	60	60
CARLOW, . . .	92	76	78	78	85	80	72	72	72	80	80	80	80	80	80
CAYNE, . . .	68	62	51	51	75	55	78	78	78	66	66	66	66	66	66
CLARE, . . .	67	61	60	57	62	62	62	62	62	62	62	62	62	62	62
CORK, . . .	80	70	72	65	63	63	65	65	65	65	65	65	65	65	65
DONNELL, . . .	74	67	61	70	54	56	65	65	76	71	67	67	67	67	78
DOW, . . .	55	60	75	65	78	60	65	70	70	70	70	70	70	70	70
DUBLIN, . . .	98	75	67	65	78	62	61	61	61	61	61	61	61	61	61
FERRISBURGH, . . .	65	57	55	61	59	62	65	65	65	65	65	65	65	65	65
GALWAY, . . .	74	71	65	65	58	62	60	60	60	60	60	60	60	60	60
KERRY, . . .	78	62	60	61	60	60	60	60	60	60	60	60	60	60	60
KILBARR, . . .	65	63	54	57	57	51	51	51	51	51	51	51	51	51	51
KILKEEN, . . .	75	68	69	71	62	64	68	68	68	68	68	68	68	68	68
KILLY, . . .	65	61	60	60	60	60	64	64	64	64	64	64	64	64	64
LIMERICK, . . .	65	62	65	65	61	61	61	61	61	61	61	61	61	61	61
LISBERRY, . . .	62	71	64	72	72	72	57	57	57	57	57	57	57	57	57
LORRAINE, . . .	65	71	65	70	67	78	70	64	74	69	65	64	64	64	64
LONDON, . . .	69	69	65	65	64	65	65	65	65	65	65	65	65	65	65
LONDON and DUBLIN, County of Town.	78	70	68	69	70	63	67	67	67	67	67	67	67	67	67
MAYO, . . .	73	68	61	65	65	65	67	67	67	67	67	67	67	67	67
MEATH, . . .	66	58	62	60	69	60	66	66	66	66	66	66	66	66	66
MOUNTAIN, . . .	45	44	45	45	45	45	45	45	45	45	45	45	45	45	45
QUINN, . . .	60	71	60	60	60	60	60	60	60	60	60	60	60	60	60
ROBINSON, . . .	72	51	55	65	66	64	64	64	64	64	64	64	64	64	64
ROSE, . . .	60	75	69	67	65	60	67	67	67	67	67	67	67	67	67
TEPPER, . . .	74	69	60	61	100	64	61	61	61	61	61	61	61	61	61
TYNNE, . . .	68	62	68	62	68	70	65	65	65	65	65	65	65	65	65
WATERFORD, . . .	75	70	68	68	64	66	66	66	66	66	66	66	66	66	66
WIMBORNE, . . .	66	62	57	55	61	68	68	68	68	68	68	68	68	68	68
WIMBORNE, . . .	78	65	64	61	65	65	65	65	65	65	65	65	65	65	65
WIMBORNE, . . .	70	61	60	60	74	62	61	61	61	61	61	61	61	61	61

OBSERVATIONS

OF THE

DISTRICT INSPECTORS OF THE ROYAL IRISH CONSTABULARY AND OF
THE SERGEANTS OF THE METROPOLITAN POLICE,

WHO ACTED AS SUPERINTENDENTS OF ENUMERATION;

IN REPLY TO A CIRCULAR DATED 29TH OCTOBER, 1880, ON THE PROBABLE CAUSE TO WHICH THE GOOD
OR BAD YIELD OF THE VARIOUS CROPS IN EACH OF THEIR DISTRICTS MAY BE ATTRIBUTED.

PROVINCE OF LEINSTER.

PROVINCE OF
LEINSTER.

CARLOW COUNTY. *Baymountstown D.*—The yield of the various crops in this district, which are all good, is attributed to the favourable season. The corn was sown without much wet; the roots got ruin at intervals, in the early part of the season, which prevented farmers having to sow the seed a second time, consequently giving an abundant return. The potato crop in this district is very good. *Carlow D.*—The green crops in this county have been generally fair and well saved. Wheat, which was early sown, was much better than that which was sown later on. In dry and sandy soil, oats was indifferent, but elsewhere good. Barley, a very fair crop, indeed. Potatoes good. Turnips, &c., bad, owing to dry weather in the early part of the season.

DUBLIN COUNTY. *Balbriggan D.*—The average yield of the various crops this year being very good. I attribute same to the fine season. *Clontarf D.*—Wheat and oats about same yield as last year. Barley, not so good as last year, owing to rain and damp at the time of ripening. Potatoes, not so good as last year, as large portion are blackening in consequence of the wet season. Turnips, mangold, cabbage, same as last year. Hay, better crop than last year, owing to wet season. *Colinstown D.*—The average rate of produce for this year in my district were nearly similar to those of 1878, there being a slight increase of the potato and vegetable crops, principally owing to the suitability of the season for the growth of the above-mentioned green crops. *Dunshaugh D.*—The harvest generally has been fairly good. The potato crop, which promised well, seems to have suffered considerable injury from the recent rains. *Kingscourt D.*—There is a slight increase in all crops in consequence of the more favourable weather during the season. *Lacree D.*—The crops generally throughout this district were fully up to the average yield both in quantity and quality. Turnips and mangolds were below the average in consequence of a run of dry weather in the early part of the season. *Monkstown D.*—There is a slight increase in the produce of the different crops, in consequence of the favourable season.

KILDARE COUNTY. *Athy D.*—The yield of the various crops is somewhat improved which, in my opinion, may be attributed to the absence of frost in the earlier part of the season, the farmers applying more manure, and a better system of cultivation having been established than in previous years. *Kildare D.*—The crops of all kinds are very good in this district this year. Hay crop, very heavy and well saved. Potatoes not yet dug out, owing to the heavy rains. *Near D.*—The yield of the various crops may be considered good on the whole, and this, I believe, to be attributable mainly to the favourable weather while the various farming operations were going on. *Robertstown D.*—I consider the grain crop in general

good, though a bit short of straw. Harvest weather was fine, so labour cheap. Potatoes in upland an average crop. In bog-land a bad crop, as the early frosts in May, &c., greatly affected the bogs. Root crop decidedly good. Turnips were down early, and thus got the rain. I have never seen a better yield than the present. Hay good, and well saved. In general, crops decidedly above average.

KILKENNY COUNTY. *Callan D.*—The yield of the various crops this year is fair in comparison with years past, which may be attributed to an improved method of cultivation, and the good season which we have had. Turnips suffered much through want of rain. However, the yield compares favourably with that of previous seasons. *Castlemore D.*—The yield of the various crops in this district, viz., wheat, oats, barley, and hay, may be considered good, and the potatoes were exceptionally good. Turnips and mangolds were rather poor. Carrots are not generally sown here, but the quantity was good, and the same may be said of the cabbage crop. Last spring was very favourable for fanning operations, and the summer was very warm and dry. *Johnstown D.*—The various crops raised in this locality are in general very good, being considerably above the average in quantity and quality, which is to be attributed to the serene weather during the harvest season, and the more than usual attention paid by the farmers to the ploughing, seedling, and weeding of their holdings. *Kilkenney D.*—The crops are generally good in this district. There was moisture enough to give a good crop of hay, but not sufficient to injure the corn. Roots also have had sufficient rain to make them better than for some few years past. Potatoes are a very fine crop and cheap enough to be obtainable by the poorest. *Piltown D.*—The past season has been most favourable for the growth and ripening of the various crops. No crop has failed; all are up to, or nearly up to, the average. The most successful was the hay crop, which was much above the average both in quantity and quality, a warm, moist spring, favourable for the growth of grass, being succeeded by dry, sunny weather at the season for hay-making. The corn crops are above the average, and were sown in splendid harvest weather. Root crops are about the average. Potatoes are a good crop, about the same yield as last year, but there is more disease, owing to heavy rains before and after the corn harvest. *Thomastown D.*—Wheat and barley crops, which are the most important in this district, were above the average this year. Oat crop also yielded well. Potatoes also good, with little sign of disease. Hay crop excellent, and well saved, the weather being very favourable. The only crop which may be put down as a failure was the turnip crop. This was owing to want of rain for a long period after being sown.

KING'S COUNTY. Glenderry D.—The crops this year have all been very good, and the farmers appear to be very fairly satisfied with the results of the harvest. Potatoes only are not a good crop. This they attribute to the wet autumn and late frosts last spring.

Ferbane D.—In this district at the last harvest potatoes produced less than the average yield, as the spring was wet and late, and there were very severe frosts in May. Turnips: There was no crop of any consequence, even what was sown, on account of the dry June and wet July, did not give a satisfactory yield. Mangolds: This crop was about the average in most lands, but in uplands the crop failed for a similar cause to that of turnips. Oats: This crop was very fair, and about the average. Barley: There was a fair crop, although not so much was sown as last year. Wheat: There was very little of this grain sown in the district.

Meadow: The yield of hay was very good, although in many places much of it was lost by not being sowed before the wet weather came on, and in the hollow meadows along the Shannon the heavy floods did great damage.

Shirrow D.—The crops in this district have been very fair all round, owing to the seasonable weather we have had. The potato, oat, and barley crops were all good, and the turnips would have been much better were it not for a long spell of dry weather in the middle of the summer. This also caused the straw to be very short, as the grain ripened very quickly in the hot weather.

Fallacree D.—The turnips that were planted during the drought in May and June are a total failure, whereas those that were sown during the rainy weather have turned out a productive crop; same applies to mangolds. Owing to the continued drought, the oats in some places are not of good yield. All the other crops are up to the average of past years.

LIMERICK COUNTY. Ballymahon D.—The harvest has been better than usual, the crops having been, on the whole, well sowed; but many smaller quantities of hay have been lost or very much injured owing to the dilapidation and want of energy by the owners in saving it at the proper time. In several parts of the country it is to be seen to this day in fields, blackened by the rain, when it should have been safely raked two or three months ago. The season has, on the whole, been a fine one, favourable to the farmers.

Grassard D.—It is the general opinion that the fair average yield of the various crops this season may be attributed to the weather, which, on the whole, has been favourable.

Longford D.—The good yield of crops in this district must be attributed to the good spring and summer weather. Potatoes grown in bog land were injured in July last by the frost, otherwise the yield was good. Turnips and mangolds suffered from the dry summer.

LEITH COUNTY. Ards D.—On the whole, there has been a fair average yield.

Drogheda D.—The bad yield in some of the crops is attributed to a sudden change to very dry weather about the end of May, which seriously injured the growth of turnips, &c. Other crops, which had been sown previous to that time, had taken root, and the change benefited them.

Dundalk D.—With the exception of turnips, all the crops grown in this district are up to the average this year. Hay is a particularly good crop, and well sowed.

MEATH COUNTY. Ashby D.—The crops of oats, potatoes, and hay, &c., the principal crops raised throughout this district, were about the average this year, and, therefore, call for no special remark. The yield of turnips, &c., was not so good as usual, owing to continued drought.

Dunshaughlin D.—This district is almost entirely pasture land, and on that account I am unable to give any particulars as to good or bad yield of various crops. Potatoes are the only crop grown, and they were a fair crop, being grown in dry soil.

Kells D.—All the crops have been very good,

except, perhaps, the turnips, which may be accounted for by the want of rain when the seed was first sown.

Nesbit D.—The crops in this district were considered good for the most part, which was mainly due to favourable weather.

Slane D.—The crops in general have been very good this season. In consequence of such fine weather during the summer months, hay in particular has been very abundant. Straw is not so plentiful, as the months of June and July were very dry. Mangolds and turnips, although looking indifferent in the early part of the season, increased very much later on.

Trillick D.—The crops in this district have been up to the average. On light soils the turnip crop has been almost a failure. Although oats are good, owing to want of rain the straw is not so heavy as usual. There is some disease in potatoes, owing to excessive wet after long drought. Hay is a good crop, and well sowed.

QUEEN'S COUNTY. Abbeyleix D.—The season has been exceptionally favourable for all crops, with the exception of late-sown root-crops which have in many cases failed owing to the long drought in June and the first half of July.

Ballykean D.—The fair average return is due to the seasonable weather which we have had in this district.

Maryborough D.—The corn crop was excellent; far above the average; of course this is due to the very favourable season. Mangold wurzel, which I am informed can stand dry weather, is also above average; but turnips and potatoes, owing to drought, are below the average.

Meaurath D.—The hay crop is good, both as regards yield and quality, especially first and second crop. Meadow hay is not so good as regards yield. Barley and oats are both good as regards quality, and well up to average as regards yield. Potatoes are a good crop, fully up to average, very little disease. Turnips fairly good, but not up to yield or quality of last year's crop, attributable to the dry weather in June and part of July and August. The good yield of the other crops named is undoubtedly attributable to the frequent and beneficial rains in April and May, followed by dry and warm weather in June, July, and parts of August and nearly whole of September.

WESTMERE COUNTY. Ballymacarraig D.—The season has been wet since July, which was very detrimental to the yield of the crops—particularly the potatoes. Hay has been very abundant, but the weather unfavourable for its being sowed properly.

Castleduff D.—The bad yield of the potato crop in my district generally may be attributed to the latter end of the season being wet. The hay crop and roots (turnips and mangolds) have been decidedly good. The oats were fairly good, but somewhat marred by a wet harvest.

Delvin D.—The crops, generally speaking, are very fair in this district. There was a very good hay crop, owing to the rains in the early part of the season, and it was sowed, generally under favourable conditions. The oat crop is good, potatoes fair, and turnips and mangolds good. This is not much of an agricultural district, the people generally going in for grass farming, of which there is an abundance this year.

Slievegus D.—The yield of all crops in this district is good, and the only reason that I can attribute it to is the good dry summer and the absence of rot in the potato, comparatively speaking.

Moate D.—The crop of wheat is little or nil. The oats, fair. Barley, being an earlier crop than the foregoing, and sowed in good weather, is a good crop. Potatoes, also a fair crop, but, owing to continuous wet weather, they have become much diseased. Hay, a splendid yield, any of what was sowed during the earlier portion of the harvest, when the weather was fine, is very good; but any cut and sowed in the latter portion of the harvest was subjected to much wet weather, and was consequently much injured. Turnips, very little

PARTICULARS OF
LIMERICK.

here; a very fair crop. *Mullingar D.*—The yield is about average.

WICKLOW COUNTY. *Enniscorthy D.*—This has been, by all accounts, the best farmers' year for a long time; but their ideas as to its value are very conflicting. The hay crop was so heavy that 30s. a ton was considered high. It was chiefly saved without a drop of rain. Barley was so abundant that the market became, and remains, glutted. 13s. 6d. per barrel was the top price. The potato crop is enormous. I know two lands, not a mile apart. In one case the crop is large and abundant, in the other it is a total failure. The seed was bought from the same man at the same time, and was the same seed. But it seems to be the opinion that the ground, in many places, has been quite destroyed by artificial means. Turnips promised to be a failure, and were re-sown in many lands. Rains, however, came, and the crop is now an average one. *Gorey D.*—The crops were fairly good, owing chiefly to the fine weather. *New Ross D.*—This has been an exceptionally good year for all crops usually raised in this county, except turnips, the latter in some parts of this district having failed in consequence of the time when the seed was sown being very dry; however, in moist places the crop has attained its average produce. I believe that this year more land was under crops than for any ten years past; and although little manure was used, the cereal and other crops surpassed the farmer's expectations. There is abundance of hay in the district.

Barley was very successful; and although the price is low, yet the good produce fully compensates for all. Potatoes were very successful, and no complaints about them are made in any way. *Taghmon D.*—The yield of the various crops in this district for present year has been good, with the exception of the barley and turnip crop. The reason of the former not being so, was owing to the latter end of the spring being so wet, the time for sowing it; and the latter failing owing to the dryness of the month of June.

WICKLOW COUNTY. *Bray D.*—The cause of so favourable a yield of crops this year is owing to such fine weather in the spring, followed by a good summer to ripen, and a most favourable autumn to gather in and store. *Dunlough D.*—Generally the good yield of all crops in this district this year is attributable to a mild spring, and favourable harvest weather. *Teehanly D.*—On the whole, the produce seems to be slightly under average. Oats and turnips are not so good as last year. It is difficult to account for the falling off in oats. The harvest weather was fairly good, and good crops were anticipated. There is also a falling off in mangolds; but this is of no importance, as little is grown in this district. The first crop, hay, was well up to average; but hay on old meadow land was inferior, the weather of the early summer being too dry for it. Other crops were about average. *Wicklow D.*—The produce this year, I am informed, is over the average, caused by the fine dry season. The turnip crop has suffered slightly from same cause.

PROVINCE OF MUNSTER.

CLARE COUNTY. *Ballynagheen D.*—The produce of lands in this district this year appears to be over the average as regards all crops. This is to be attributed to the exceptionally fine summer and harvest. *Ennis D.*—The hay crop is plentiful, but not so abundant as is promised to be, owing to heavy rains at the latter end of summer; despite the rains the cereals (of which in these parts a comparatively small quantity is sown) proved up to the average. The root crop, owing to a suitable season, has turned out to be very satisfactory. The potatoes are plentiful and sound; the weather being propitious. *Boscawen D.*—The yield in hay, turnips, and mangolds has been considered good, owing to the season favouring the growth and maturing of these kind of crops. Cabbage has also been considered a good yield, and farmers who planted this vegetable for feeding purposes for cattle are high in its price. The potato crop, which is the most important of all, is much and generally complained of, owing to the admitted failure of the champion, which in this locality has ceased to be the productive crop, which in previous years is proved to be. I, in a great measure, attribute this degeneracy to the general system of tillage persevered with in this locality, that is, continually tilling the one field, and with the same crop, which in most cases is forced on by artificial manures or seed. Bad tilling and no subsequent weeding, so that instead of one crop the farmers here usually have about fifty different ones. *Kilnagham D.*—The good average yield of various crops is due to the seasonable weather of past summer. *Kilnakee D.*—The crops in this district, generally speaking, were quite up to the average this year, except the potato crop, which in some localities suffered from the unusually long spell of dry weather in the early part of the season. All the other crops were abundant and of fairly good quality. *Kilrush D.*—The crops this year were good above the average, the rain came in the right time for the hay, which is the staple produce of West Clare, little cereal crop being grown here; the potatoes are a good crop, both as to quantity and quality. *Swordsbridge D.*—Hay was a good crop in this neighbourhood, wheat ditto, but oats and potatoes were not nearly so good as usual. May and June

were very wet months, and it is probably owing to this that the various crops were not better. *Tulla D.*—The difference in the good or bad yield of the different crops in the several electoral divisions was caused by the difference of the land. In some of the divisions the land is very bad and mountainous, while in others it is very good. As a whole, the crops in general were very fair.

CORK COUNTY, E.R. *Ballyvaughan D.*—The crops all round were good in this district, owing to the good season, and the fine weather during the autumn for sowing and storing them. *Charleville D.*—This was an exceptionally good year. The yield of the various crops is rather above the average, and this is believed to have been caused by a favourable season, the weather being all that could be desired by the farmers. *Cork, North D.*—The crops in this district have been very good this year, particularly the potatoes and hay crop. Root crops were tolerably good, notwithstanding the hot weather in July last. *Cork, South D.*—The crops on the whole for this season have given a very good yield, which may be attributed mainly to a season of good weather. *Ferney D.*—From statistics which I have collected, it would appear that in the greater part of this district the hay and oat crops are better than, and the potato crop is not so good as, in 1888. On the whole the crops were good, owing to the favourable weather, especially the absence of much rain during harvest. *Keshbrook D.*—The harvest this year in this district is one above the average, every crop yielding abundantly. Prices are fairly high and remunerative, and I attribute this to a better feeling existing in the country, whereby trade has improved, and this, taken in conjunction with an abundant harvest, has considerably improved the position of the tenant farmers. *Kinsale D.*—With reference to the rates of produce of the several kinds of crops in the electoral divisions of this district, which on the whole (turnips excepted) were good, I beg to state that the cause attributable to such, in my opinion, is that the weather was so favourable during the season the cereal crops were allowed to fill and come to perfection, whereas in some years past the heavy rain in the

months of July and August, lodged in the corn and prevented the grain filling; also the fine weather, in cutting and saving the crops, aided materially to the rates of produce. The dry season also tended to prevent blight in the potato crop. Turnips sown late in dry seasons, and in light soil, as this is, are liable to fall after coming over ground, and also are liable to be attacked and cut away by the fly, which was the case in many places this season. Mangolds as a rule are sown earlier, and in stronger soil than turnips, and so far as this crop is concerned the average was fair, owing, I believe, to this reason. Hay was also a fair crop, as there was a fair moisture in the beginning of the season, and also fine weather for cutting and saving the crop. The farmers as a rule have paid more attention to the cultivation of their land this season than they have for some years past, owing chiefly to many of them having purchased their holdings under Lord Ashbourne's Act, and now have more interest in their farms than they previously had. *Malheur D.*—The favourable weather is the only reason I can give for the good yield of the various crops. *Middleton D.*—The yield on the whole in this district has been far above the average. Crops all good, and no failures. Very fine hay and corn crops. Barley much grown, and of good quality, and yield of potatoes ditto. The weather most favourable, and the harvesting weather particularly fine and dry. *Nicholsown D.*—In consequence of the favourable seasons during the present year, the crops may be considered to have yielded somewhat over the average. There was no difficulty in sowing and harvesting the crops, except in some cases of late meadows. *Quenston D.*—In this district the various crops, oats, barley, potatoes, turnips, mangolds, hay, and in fact all crops, are much better than for some years past, which is attributable to the favourable state of the weather at seed-time, and all through the summer. The fine weather during the harvest months helped considerably to increase the produce of the oat crops. There is an abundant crop of hay, which is chiefly due to the favourable weather in the early part of the season, when the meadows were beginning to grow. The potato crop is also good, the blight did not set in until late in the season, and there is not much disease; this, I believe, is due to the fine weather during the autumn months. *Youghal D.*—The undersown crops are all above the average, both in yield and quality, viz., oats, barley, and wheat. The good harvest in these crops is attributed to the very favourable season. Hay was a good crop, and well sown, but rather short, owing to dry weather. Potatoes are an average, and other roots are rather below the average, owing to want of rain for some time after sowing.

Coke County, W.E. Sandes D.—There was an excellent yield in all crops owing to the seasonable weather. Turnips are somewhat below the average, in consequence of very dry weather after they were sown. *Bessy D.*—As far as I can learn the yield of the various crops is above the average. I hear no complaints throughout the district. The weather was propitious in every way, both for sowing and saving the crops. I am informed that this is one of the best seasons for the farmers that has been known. *Cassidown Ave D.*—The potato crop in this district is not a high average this year, in consequence of the continued drought during the summer—which was very injurious to very light land, such as is here. The blight too appears to have increased this year. The grain crop suffered also during the summer (it being so very dry), the soil being so very light in this mountainous district. Hay, a good average as the earth was well covered with grass before the dry weather set in. Green crops also suffered from the excessive and continued drought of the summer. *Glenhill D.*—The various crops in this district are much better this year than in any recent year, and consequently the yield is better. This increase is attributed to the

very favourable weather during the summer and autumn. *Dunsmuir D.*—On the whole, this year's yield is above the average in this part of the country. The only crop which has not succeeded as well as last year, is the turnip crop, which has in a few instances failed, owing to the long drought of June and beginning of July. *Macraes D.*—The produce of all the crops in this district has been considerably above the average this year. The hay crop was very abundant, and the most of it was saved without getting much wet. The yield of potatoes was also good. They are remarkably sound though not so large as in previous years. Mangal and turnips were a fairly good crop. The good yield of the potato crop may be attributed to the absence of the blight, and in case of the other crops to seasonable weather during the year. *Millstreet D.*—The rates of produce in the several electoral divisions of this district are fair. The district being mountainous, the season was favourable for all crops grown in it, and as the harvest was later than in low-lying districts it was on the whole safely gathered. *Stirling D.*—The yield of crops throughout this district has been above the average this year, owing to a favourable season. *Small D.*—Owing to the mildness of the spring and occasional showers, the first crop of hay in this district was rather good. Wheat and oats also, owing to the same causes and the dry summer, were a better crop than they have been for some years past. Potatoes too would have been a good crop, but for the wet weather which set in, in the latter end of the harvest, causing a number of them to blight. Turnips and mangolds which were rather backward in the summer, owing to the dryness of season, afterwards turned out a fair crop, owing to the wet which set in, in the end of the harvest.

KERRY COUNTY. Calcestone D.—The crops in this district are up to the average. The potato crop is much more plentiful than in former years, owing to the favourable season. *Cassidown D.*—There is a good yield this year in all crops (save potatoes) in the several electoral divisions in this district. The fine weather up to July favoured very much the growth of oats and the other crops, but the wet weather from end of July up to the present had a most injurious effect on the potato crop, all the other crops are good. *Diegle D.*—The crops on southern side of watershed are inferior, owing to much heavier rainfall experienced on that side. *Emmure D.*—The potato and oat crops in this district was not good, caused by very wet weather in May, also the oats were affected this year by what the farmers term a "wire worm." The remaining crops were fairly good. *Killybeg D.*—The potato crop in moor lands or low ground this year is an average good crop. The yield in dry lands is not good. The drought during the months of June and July, followed by heavy rain in August, did not improve the chance of a good yield. The tops were not injured by the blight as in previous years. The turnip and mangold crops are very fair average crops. The oat crop is a very fair average, compared with former years. The straw is good, and I hear no complaint as to the yield of oats. There has been a very good return of hay. Other crops are not much sown in this district, and I, therefore, cannot give any opinion. *Millington D.*—All the crops in this part of the country appear to have been very fair this season. There is a great quantity of hay in the country, and consequently it is very cheap. The meadow hay cut in July was rather light, but the hay cut later on was heavier, but it suffered a good deal from the wet. The turnip crop looked rather bad at first, owing to the drought, but it has greatly improved in appearance. The oat and potato crops are both good. Very little damage appears to have been done to either by the wet in the latter portion of the season. Very little wheat is grown. On the whole, I do not hear much complaint about anything. *Nietes D.*—The bad yield of crops in this

PROVINCE OF
MONTEZUMA.

district may be attributed to the wetness of the season. *Troche D.*—The season was favourable for all crops in this district, save that of the hay crop. Owing to the continuous drought in midsummer the hay crop is not as good as that of last year.

LEMERCK COUNTY. *Aldeghele D.*—The general produce of all kinds of crops has been good in this district this year. This is attributable to the favourable spring, the admirable summer, and the fairly good harvest. Most of this district is mountainous and, as a rule, rain prevails. This year the spring was dry, which enabled the farmers to cultivate their lands in good time; the summer was dry, and there was sufficient dry weather in harvest to enable all to secure their crops. *Adore D.*—The year was generally favourable as regards all crops. There is no extraordinary yield in any one of them, nor is there any marked falling off. The land in this district is much better in some parts than in others, which will account for the great difference shown in the yield of potatoes in some places. *Bruff D.*—The greater portion of the land in this district is under grass, as it is chiefly used for fattening cattle and for grazing milch cows. Such small quantities of wheat, oats, and barley as were sown, yielded very fairly, but the wet weather injured these crops to some extent. Potatoes yielded well, but a considerable portion of them, in some localities, became diseased, specially "dumplings." I think the heavy fall of rain before the potatoes were fully matured, contributed to the spread of disease amongst them. The rain which affected the potatoes injuriously, had a contrary effect on turnips and mangolds, which yielded very well. Hay is a good crop, but a considerable quantity (especially in low land) was not well saved, owing to the fall of rain. There appears to be an abundant supply of hay in the district, and there has not been much of it consumed up to the present, except by horses, as the weather latterly has been mild, and there is grass to be had in the fields for cattle. *Kilfenne D.*—Owing to the summer months being so favourable all crops grew well in this district. Wheat and oats were a very fair crop. The potato crop was good, and all green crops, such as turnips, mangolds, cabbages, &c., were good. The hay crop was very good. *Lamerick D.*—As regards the yield of crops this year, mangolds, turnips, and barley have been below the average, this is generally attributed to the wetness of the season. The other crops of corn and hay have been very good, hay exceptionally so, owing to the season favouring them. *Newcastle D.*—The yield of the various crops in this district for the present season, is a fair average. The proportion of land under tillage is gradually becoming smaller, owing to the present high price of cattle. The district, however, has always been mainly a grazing one. Hay and grain crops are good, and as the harvest weather was favourable, have been saved and stored at small expense. Green crops, with the exception of potatoes, are not up to the average of former years. This may be attributed to the long period of dry weather in the months of May and June. The potato crop is good, and not largely affected by disease. *New Pallas D.*—The increased produce in some crops, particularly wheat and oats, is attributable to the favourable condition of the land when planting, the months of March and April being dry, the subsequent rains in May, followed by favourable weather in August and September, for ripening and storing. A slight decrease is noticeable in the hay crop from 1888, but is considered a good average crop. Potatoes, turnips, and mangolds are also an average crop this year, but the two latter are not grown to any great extent in this district. *Robbards D.*—Wheat is a very good productive crop this year, which may be attributed to the very mild, favourable winter of 1888, just after it had been sown. Oats and barley are not so good, and the yield of each crop is not so abundant as that of wheat, owing to the month of June setting in so dry, which proved very deleterious to these two

cereals. Potatoes are a good, abundant crop, but many complaints are being made of the disease in this crop, which is mainly attributed to too much rain having fallen in the month of August, just as the potato was nearly ripe, and had almost ceased growing. Some farmers allege that one-half of this crop is "black," or diseased, and others say that one-third, at least, is thus injured, but the yield is a fair one, and quite sufficient to meet the wants of the people whose principal support is derived from the potato. Turnips, in general, are good, but some farmers look upon it as a poor crop this year, on account of the dryness of the season at the very time when the seed was put into the ground, and for some short time afterwards, as vegetation was about to set in. The yield in other green crops is considered very fair, which may be assigned to the weather, which turned out favourable to their growth. The hay crop, although of good quality, has not been quite so abundant as in previous year, owing to the severe dry weather in early summer, which proved very injurious to the yield in this crop, particularly in upland. The yield was not so heavy as in previous year, but the quality of the hay was much better, and the crop was secured in good time by the farmers.

TIPPERARY COUNTY, N.R. *Borrisokane D.*—The potatoes are not so good in this district as last year, owing to the blight having set in so early, and the turnips are not up to the average, owing to the dry season. All other crops are very good. *Newry D.*—Barley and oats, good crops, owing to the fine weather in June, July and August. Hay very good, owing to the rains of May and early June, and fine warm weather of July and August. The dry weather also served the potatoes, but had a very bad effect on turnips, which, however, somewhat recovered themselves by the late rains. In most cases they had to be re-sown. *Newport D.*—The crops as a rule were very good throughout this district, owing to the mild spring and dry summer. The potato crop, however, suffered from the wet weather in spring, and is not so good as last year. *Roscrea D.*—The chief reason the crops were so good this year in this district was the fact of the exceedingly favourable weather we had. I also hear that more manure and better tilling were indulged in. The mangolds and turnips were the only poor crops, attributable to the weather not aiding them in the early stage of growth. *Templemore D.*—The yield of the various crops I find is considered very fair. Owing, however, to the dry season at the commencement, a good deal of the turnip crop here and there missed, but those that did come on are generally a splendid crop, and almost counterbalanced the loss in those that missed. The good yield generally is owing to the favourable season, besides the land about here is good. *Thurles D.*—The crops generally are better than last year, which I attribute to the favourable season.

TIPPERARY COUNTY, S.R. *Cahir D.*—All the crops this year were very good. Above the average, owing to the weather being so suitable. *Curriehon-Quir D.*—The slightly increased rate of produce in this neighbourhood appears to have been due to the favourable weather. The potato blight has not hitherto done much harm in this neighbourhood. *Cashel D.*—I believe that all round the crops of every sort have been exceptionally good this year. I believe that a favourable state of the weather at the different periods when it has such an effect on the prospects of the farmers, has been the cause. *Clonsilla D.*—The average produce of wheat and oats in this district this season has been rather above that of former years. This may be attributed to the early part of the season being moist, and a good harvest. Meadow crops are also above the average, owing to same cause. The potato crop in this district is not quite so good. I think the early part of the season being wet was the cause of this. Turnips also are not quite up to the average, owing to the dryness of latter end of May and June.

Taking the crops generally in this district, the average produce all round is very satisfactory. *Dundrum D.*—I beg to say the harvest has been abundant. The good season has been productive of very heavy crops. The cereal crops full in the grain and rich in the stalk. Potatoes, turnips, and other roots abundant and free from injury. The varying heat and rain throughout summer and a dry early autumn, precisely suited the growth and in-gathering of crops in this part of the country. *Kilkenzie D.*—I attribute the good harvest of all crops, corn, hay, &c., in this district this season to the fine weather we have had. *Tipperrary D.*—Wheat, oats, and hay were a most excellent crop, owing to the favourable season. Turnips, mangels, carrots, and cabbage were fair. Potatoes not so good as usual, owing to the drought in early part of season.

Waterford County. Cappoquin D.—The harvest this year was a very good average one. All crops were good, with the exception of turnips, which were

injured by the dry weather of the early part of the season. The hay crop was very fine. *Dungannon D.*—On the whole, there has been a good yield for all crops. There is a slight decrease in the potato, turnip, and carrot crops, which is supposed to be owing to the dry summer, in consequence of which the seed did not come up evenly. There is an increase in the produce of wheat, oats, and barley, which is attributed to the favourable harvest. The grain ripened properly, and was sound, and also produced a good yield. There is not much of an increase or decrease in other crops. *Portlaoise D.*—The yield of all crops in my district has been good, and I think this is so attributable to the exceptionally good weather of the spring and summer. *Waterford D.*—The yield of the various crops in this district, as compared with recent years, is good. This is attributable, chiefly, to the good weather that prevailed during the autumn for harvesting operations. Also, the farmers seem to give more attention to agricultural parasites, and an increased spirit of industry on their part is setting in.

PROVINCE OF
MUNSTER.

PROVINCE OF ULSTER.

Armagh County. Ardrin D.—Owing to the very dry weather in the early summer, the flax crop suffered severely; and it is, generally speaking, a light crop throughout this district. The grain crops, for the most part, were rather lighter than usual. The other crops appear up to the average. *Ballyvaughan D.*—Generally the crops have been very good in this district. Hay, of which a large quantity is used in this district, was an abundant crop, and especially saved. The weather being most suitable at the time. Oats also was a very capital yield, but suffered to a certain extent in ripening, owing to the very wet weather in July and August. Potatoes have given a very good return, but they are not as dry a crop as might be wished, owing to a somewhat similar cause. Flax was a very good crop, the weather being specially suitable for it. Turnips also were satisfactory in their yield, and little affected by fly. On the whole, this has been quite above the average harvest. *Ballymoney D.*—Owing to the weather having been unusually favourable, the hay crop was above average produce, and better saved than for some years past. The various other crops in this district were about average yield. The potato crop, however, was somewhat injured by the heavy rains at end of season, and, consequently, is not quite so good as it would otherwise have been. *Belfast, North, D.*—The yield of the grain crops this year was bad in quantity and quality, owing to the wet season coming on when it was ripening. As regards the potato crop, the yield has been good, but the quality was considerably damaged by rain, thereby leaving the crop an average one only. Hay has been an abundant crop, but the fact of the weather coming bad and wet at the time of saving, greatly deteriorated the value of the crop. Respecting turnips, mangels, and cabbage, the yield has, on the whole, been eminently satisfactory, owing to the moist weather which is (in these particular crops) invariably favourable to their growth. *Belfast, South, D.*—The rates of produce are larger than in other years, the probable cause being the favourable weather. *Carrikerferry D.*—The crops, generally, this year are abundant, but not well saved owing to the inclement weather. Many farmers are "a penny wise and a pound foolish"; by saving a pound or 30s. in labour they risk the saving of their crops, and they do not pay, in many instances, the necessary attention to cleaning their land of weeds or to selecting good seed. *Lisburn D.*—The yield this year is little, if anything, above the average; this I attribute to the exceeding bad weather during spring-time and up to the end, I may say, of August, when a more prosperous state of things set in. Potatoes in this district have been exceptionally good. Oats of fair yield, but short in straw.

Armagh County. Armagh D.—The small yield this year, is attributed to the early part of the season being so damp, that the crops were not got in early enough; then the weather got so dry that the land became hard, and to a great extent prevented growth of all crops, particularly potatoes, turnips, and mangels. *Lurgan D.*—Hay was a good heavy crop, but that some of it was much injured by the wet weather in the latter part of the season. The turnip crop was light owing to the dryness of the ground when the seed was being put in; but the crop improved with the subsequent rain. The same may be said of the other root crops. The grain crop was much injured by the continued wet season, and was in many places prevented by it from coming to maturity. *Enniscorthy D.*—Taken all round crops were a good average. *Portadown D.*—The good crop of early hay, was, in my opinion, attributable to the rain in early spring. The potato crop was not good, in consequence of the continued drought until late in the season. The turnip crop and mangal wurzel were injured by same cause. The old meadow hay was injured by the rain in August and September, and a large quantity along the banks of the River Ban was flooded, and suffered much damage. Taking the crops generally in this district a very fair average is in it. The farmers are receiving good prices for the produce of their farms.

PROVINCE OF
ULSTER.

Cavan County. Ballyborough D.—On the whole this season has been a favourable one. The potatoes were very good—no complaints of blight. The yield of oats was good, but the straw was short. The hay crop was abundant, exceedingly good and well saved. Turnips were light. The flax crop was middling. The dry summer was favourable for the potatoes, hay, and oats, but there was not enough moisture for flax and turnips. *Ballymorehugh D.*—The crops in this district were generally good this season. Hay was good, and well saved, owing to the dry weather in June and July the crop was not so heavy as in 1888; oats is the principal corn crop, and it is very fair; the dry summer caused the straw to be short, but the yield on the whole is very good. Potatoes are good for food owing to the dry warm summer, and the yield is very good, but they are not so large as in 1888; the crop came to maturity early this year, and being good there appears much more of the crop used at this season than there was of last year's crop at this time of the year. Turnips are fair, but hardly so good as last year owing to the dry summer; cabbage is generally a good crop. Flax, there is little sown of this crop in this district, the same applies to wheat, barley, &c. Turf, for fuel, is plentiful as the summer

FAIRMOUNT FOR
UTTERA.

was suited to drying of it. *Casson D.*—The crops were generally good this season; the seed-time was dry, and the ground in good order for sowing. *Killedbender D.*—The potato crop was considerably injured, especially on light soils, by the long drought of June and July. Hay also suffered from the same cause, and so did turnips and flax. The other crops appear to be up to the average. *Scandinavia D.*—The potato crop is not so good as anticipated; except in very good and dry seasons it seldom reaches a good average, on account of the humid nature of the soil. The hay crop is fair, as the season for mowing it was remarkably favourable. The yield of grain crops is on the whole a fair one. Root crops are cultivated to a limited extent only, but the yield is considered on the whole an average one. The yield on the whole may be considered fair.

DUNDEAL COUNTY. Ardara D.—There is no marked difference in the yield in most crops. Potatoes are a good crop, much above the average. This I consider principally due to a favourable season. The other crops grown in this locality are about an average, and do not therefore require any observations. *Ballyshannon D.*—Crops are all up to the average in this locality. Potatoes are a good crop, but would have been better but for the heavy rains in the early part of August. Turnips are above the average. Early meadows were smitten by the fine weather in June and July. Straw, which at one time appeared likely to be a short crop, is up to the average. *Buncrana D.*—There is a fairly good yield of crops, which is attributable to fine weather in the early summer. The yield in cereals would have been better, but for the extreme wet in the later summer and harvest. *Dunfanaghy D.*—I consider that the favourable yield this year is due, in a great measure, to the mildness of the season in comparison to others. The growth was considerably stunted at the commencement of the season, owing to continued dry weather, but the damp setting in afterwards helped to facilitate considerable progress in both growth and yield before a continuance of one class of weather had time to work its effect to any extent. *Dungloe D.*—On the whole, the harvest of this year has been good. The potato crop was very productive. This crop is regarded as the most important one by the inhabitants of this district, as to it they owe their chief means of subsistence. The grain and hay crop have also been fully up to the average, probably as good as they could have been when the nature of the soil is taken into consideration. *Letterkenny D.*—The potato crop, though perhaps a little above the average of last year, is far under what was expected in the early part of the season, owing to the wet weather, which has done so much harm. The oats is about the average of last year. Turnips and flax is about the average of last year. Hay, in many places, has been greatly injured by wet weather, and so, I believe, under the average of last year in this district. *Monille D.*—All the crops throughout this district were good. A good yield of potatoes. The corn crop was even above the usual yield. The season was very favourable on the whole, to which fact the good yield must be attributed. *Baptes D.*—The potato crop in this district, generally speaking, was up to the average yield, except in mountainous places. This is attributed to the moisture early in the season and the warm weather ensuing in June and July. The turnip crop was good, and owing to the same reason. The flax crop was better than last year, and the people about here speak of it as much better than the usual yield. The corn crop, early in the season, promised better than it ultimately yielded. This is due to the lack of sufficient moisture in the summer months, which has made the cereal crops unusually stunted.

Down County. Banbridge D.—The potato crop is much below the average of late years, owing, chiefly,

to the wet spring and the drought in the months of June and July. The hay crop is above an average, owing to wet weather in May. Oats is below the average, owing to the cause of failure in the potato crop. Flax, turnips, mangold, wheat, &c., were greatly retarded in growth, owing to the very dry weather in June and July. *Dunpatrick D.*—The yield of the several crops in this district is good. I attribute this to the favourable weather of the past summer. *Newfossadoe D.*—There is a fair average yield of the various crops grown in this district, with the exception of flax, oats, and turnips, sown in dry sandy lands. The falling off in the yield from the three last-named crops is attributed to want of rain in the early summer. Flax, oats, and turnips, grown in damp soil are a good average. Wheat is a fair average crop, and hay and potatoes are exceedingly plentiful. *Ratfriland D.*—The weather, which was dry in the late summer and wet in early part of harvest, appears to be the principal or only cause affecting the yield of the various crops. I am not in a position to contrast the yield with that of former years.

FERRARDH COUNTY. Derrygonnelly D.—Neither the yield of the potato or oat crop are as good as that of 1888. The land in this district is naturally of a stiff and heavy nature, owing to the quantity of fresh water in the locality. The spring season was very wet, and both oats and potatoes were late in sowing in consequence. The harvest was also very wet, and the potato crop was attacked with disease before the tubers were matured. Turnips is an average crop, as good as last year. Hay is a good crop; but a good deal of it has been badly saved owing to the continued wet in the harvest time. *Ennistullen D.*—The various crops in this district, with the exception of potatoes and turnips, are a fair average of former years. The potato crop is scarcely up to the average, owing to the blight having set in early in the month of August, coupled with an unusual amount of rain in some months. The turnip crop suffered in consequence of the dry weather in the months of May and June. *Kesh D.*—Owing to the wetness of the early spring in this district, the crops were not put in until rather late, and this fact, combined with the dryness of June and the early part of July, which is unfavourable to light soil, accounts for the rather light yield of grain and root crops. The same causes were highly favourable to the hay crop, which was very good, and for the most part well saved. In the low-lying lands of the district, the turnip crop was good, but it was an utter failure in the high ground, as the drought, followed by heavy rain, prevented its being sown in good time. *Lisnaskea D.*—In this district the crops have been fully up to and above the average. Hay cheap and plentiful. Potatoes on damp ground above the average, on dry ground under the average. On the whole the potato crop well up to average. Turnips and mangold sown late were, in many cases, a failure; but where they grew were a good crop. Oats were poor, thin and light, and both head and straw deficient, owing to dry spring. Flax was fair in quality, but few really good samples have been seen; in general it was short in staple and light. Wheat is but little grown here, and the little I saw appeared good in quality and quantity. On the whole an excellent year, above the last two.

LONDONDERRY COUNTY. Coleraine D.—The yield of the various crops in this district has been generally a good average, not calling for special remark. *Lisnenny D.*—The yield of the various crops generally considered has been above the average in this district. Potatoes and turnips especially are an excellent crop; rain having fallen when both most required it, and so developed them. Hay and straw are of excellent quality, but rather short, owing to the drought in the early part of the season. Oats give

an average crop, but would have been better but for the heavy rains just previous to harvest time. Flax is good, but rather coarse for the same reason. *Londonderry D.*—The crops in general this year are good. This is due in a great measure to the early summer being wet, and the month of June being very warm and dry. The autumn too has been most favourable, especially to green crops, which are still growing. The potatoes are a plentiful crop, but the early kinds suffered considerably from the autumnal rains, and many rotted in the ground. The rural district being small, I cannot consider these returns as a correct standard by which to judge. *Maghers D.*—The crops generally are a fair average this season. There is not for the long and excessive drought in the early part of the season, the potato, oat and turnip crops, would have been, in all probability, much better.

MUGHAN COUNTY. Carrickmacross D.—The hay crop was a general heavy crop this season in consequence of the early rain. But the turnip crop was bad, owing to the drought at the time of putting in the seed. *Glenties D.*—The farmers of this district have extensively availed themselves of Lord Ashbourne's Act in the purchase of their farms. Having become landed proprietors they devote themselves more zealously to agricultural pursuits. This fact, coupled with a favourable season, accounts to a great extent for a more than average yield of various crops. *Moneglash D.*—The yield of the several crops in this district appears to be fairly good. In the

doctinal divisions of Tullycorbet, Rackwalloon, Cressartin, Annagalla, Beshkin, Scotstown, and Glenties the land is of an inferior quality, and the farms are small and not so well cultivated, which accounts for the crops not being so good.

TYRONE COUNTY. Askeahoy D.—The variations in the yield of the several crops are due mainly to climatic influences. The farming in this district is generally good and cleanly, but not of a very high class, the greatest fault being shallow tillage and not being sufficiently careful of manurial products. *Coalisson D.*—All the crops were up to a fair average, except flax and potatoes. The long drought in the beginning of the season, and the excessive rain towards the end, did a great deal of damage to these two crops; they are both much below the average, and of bad quality. *Dungannon D.*—The yield of the various crops appears to have been better than the average this year, and this is obviously attributable to the favourable weather. *Newtownmourt D.*—I beg to state that as the system of agriculture in this district is almost the same each year, the yield of the various crops (whether good or bad) is attributable to the favourable or unfavourable state of the season. *Omagh D.*—I am of opinion that the crops produced in such fine abundance were the result of the good weather. *Strabane D.*—The yield of the various crops in this district may be considered a very fair average, and that there is nothing calling for any special remarks regarding the yield.

PROVINCE OF CONNAUGHT.

GALWAY COUNTY. Athlery D.—The crops were a fair average in this district this year, and there has been no complaint by the farmers as far as I am aware. In some parts of the district, oats, potatoes, wheat, and hay were better than others, but on the whole there is no reason for complaint. Some farmers manage and labour better than others, hence better crops. The season was favourable, to which the good yield may be attributed. *Ballinacree D.*—On the whole this has been a very good average year. Potatoes are small, owing to the drought in the early part of the season, and are getting black in a good many instances in consequence of the late heavy rain-fall. Oats and hay are very good, owing to the favourable season, and mangolds and turnips are very good also. *Clifden D.*—The yield of crops in this district for the year has not been so good as last year, which I attribute to the wet weather. The rye crop has been good, and corn fair; but the potato crop is not good, nor say root crop. Potatoes on dry sandy land in some parts of the district have done very badly, whilst on boggy land they have done rather better. *Glenties D.*—I attribute the comparatively good all-round yield of the several crops in this district to the fine weather experienced during last spring, when the crops were all got into the ground dry. The early months of summer too were favourable for the growth of both tuberous and cereal crops. The land in this district being mainly mountainous, a dry spring and summer favourably affects the growth of the crops planted in the district, which are mainly potatoes and oats. *Drogheda D.*—It seems that the oat crop this year was fairly good, owing to its having been favoured by good weather at the right time. The potato crop, the staple one in this district, is, I am informed, not so good as was expected. The reason is ascribed to too much wet weather at certain periods. *Gahoy D.*—A great portion of this district is of limestone formation, and the dry weather, early in the season, had an injurious effect on most of the crops. For the same reason the crops in low-lying and boggy lands were good. On the limestone land the potato, turnip, mangold, and oat crops were injured by the dry

weather early in the season. The wheat, and rye, and barley crops were good, as the dry weather benefited them. In many places the potato crop was seriously affected by the blight. As a rule, early-sown root crops were good. There was a fair crop of hay. On the whole, the harvest was an average one. *Gort D.*—The light yield in the oat and wheat crops in this part of the country appears to have been due to the unavailability of the season, as also in that of hay. Root crops, such as turnips and potatoes, are abundant, the season being more suitable for them. *Loughrea D.*—The crops, on the whole, throughout this district, are of a fair average, save the potatoes, which are not quite up to the average of last year's crop. This falling off may, I think, be attributed to the dry summer, and the fact of the district around being of a limestone nature. *Keshbeg D.*—I am informed that the yield of oats and hay this year are fully up to last year's average. The potato crop is not as good as last year's, and the deficiency was caused by frost in the beginning of July, and the heavy rain in August. The turnip crop is considered better than last year's, and that is attributable to the rain in August. The above are the principal crops raised in this neighbourhood. *Portlough D.*—I beg to report that the crops were up to the average this season, and call for no special comment. *Oughterard D.*—The indifferent yield of crops in this locality is due to too much rain, and a poor stony soil. The increase in the yield of hay and oats this summer was because there was more sunshine and less rain than is usual in these parts. *Rosendown D.*—There was a good yield of various crops in this district this year. The potato crop, however, was not as good as that of previous years. This is owing to the fact that the land was not so well manured this year as in others. Any falling off there may have been in the various crops is due to the heavy rains which fell in the autumn months. *Spiddale D.*—Throughout this district the crops, with the exception of potatoes, have been very good. The yield of potatoes is about 20 per cent. less than last year, probably owing to absence of rain in the early part of the

PROVINCE OF
CONNAUGHT.

PROVINCE OF
CONNAUGHT.

DISTRICT OF
CORNWALL.

season. It will be observed that the average produce per acre in the electoral divisions of Gertanna Island, Lethemore Island, and Crumpton is much higher than elsewhere, and this I attribute to the greater quantities of seaweed spread on the land by the inhabitants of said divisions. *Thorn D.*—The hay and wheat crops were good this year, which is attributable to the fine weather that prevailed during the summer. Oats and potatoes are average crops, and turnips and mangolds fair. On the whole, the farmers are well satisfied with the season. *Woodford D.*—As the season was not unfavourable, the average yield of the various crops in this district may, on the whole, be regarded as fairly good. In those electoral divisions where the average rates of produce per acre are returned as low the land is of a poor quality.

Leston County. Bolestone D.—The rates of produce of the various crops are generally good in this district. There is no wheat sown in this district. The yield of the oat crop is fairly good, but this crop does not ripen early here, and the continuous wet weather in latter part of September and beginning of October tended very much to retard its progress towards maturity, some of it had to be cut green, otherwise the yield would have been much better. The potato crop is a good one, owing principally to the dry summer which suits the description of the soil about here; there is, however, a considerable quantity diseased in loose old lowland. The turnip crop is fairly good considering the nature of the soil. Cabbage is a good crop, the land selected for this crop being the best adapted for it. The yield of hay is fairly good, but not so abundant as last year. Any cut early in the season is well saved, but any not cut till end of September suffered very much from the heavy rain and floods. On the whole the farmers are well satisfied with the crops in this district. *Corrick-on-Shannon D.*—This harvest has on the whole been good and above average. The hay crop was very good and unusually early, and fully two-thirds of it was saved in perfect condition, one-third principally old late meadows was more or less damaged. Oats, which is the only corn crop grown in the district, except a little rye, was an excellent crop, much over average as regards oats, and fully average as regards straw; most of it was also well saved. Potatoes are a fully average crop, and but for the season being rather wet towards the end would have been an exceptionally good crop. The wet weather, however, caused a good deal of disease and rotteness in the tubers. Very little green crops are sown in the district. Small patches of turnips, mangolds, and cabbage being planted here and there; anywhere sown they were all fairly good crops. Mangolds and turnips are on the small side owing to too much rain and want of sunshine. The general prospects of the farmers are fair enough. Cattle are very dear, though there is a slight fall in prices lately in every class, except half-year old calves. Better is if anything dearer than other years, though the price is still too low. There is an abundance of food both for the people and animals, and I think there is no scarcity of fuel. *Drumshaire D.*—Taken all round a fair yield of crops has been given in this district. The potato crop is not as good as was expected, owing to excessive rain. The crop of oats is good, as would have been hay, but for heavy rain during time of saving. The root crops, mangel wurzel and turnips, have been perhaps more satisfactory than other crops. *Manorhamilton D.*—The good or bad yield of the various crops may be attributed to various causes, viz. :—the manner in which the good or bad tenant manages his farm. Where the tenant attends to his business and cultivates his farm well, a good crop follows, and vice versa with the indolent man. This year the season being comparatively a dry one has contributed to a fair produce in all kinds of crops, the soil in this district being of a moist boggy nature. *Mohill D.*—The crops are fairly good

everywhere this year which, may be attributed to the good season.

Mate County. Ballin D.—On the whole the crops grown in this district are, I think, up to a fair average. Potatoes, one of the principal crops, are, however, scarcely as good as they were last year, this is caused by the very wet season we have had during the time they were coming to maturity, the land being generally cold and wet. Oats are fully up to the average of recent years; so are turnips; and as for barley, rye, &c., they are not extensively grown in this district. On the whole, farmers appear fairly well satisfied with this year's harvest. *Ballinrods D.*—I think the average yield fair. Potatoes have suffered very much from the rain. *Belmullet D.*—The rates of produce of the crops, that are raised in this district, are more than an average for this part of the country. The good yield of the crops is due to a fairly dry summer. *Castlebar D.*—There is nothing calling for remark in the yield of the crops in general, but potatoes yield somewhat less owing to the wet weather at the time they were maturing. Hay is rather under the average, although the yield of grass was good, the wet weather made it difficult to mow, and some of it was lost, and the quality is inferior. *Claremorris D.*—The wetness of the summer injuriously affected low-lying and swampy land, especially in regard to the potato crop, which is not up to the average this year. The other crops appear to be a fair average. *Newport D.*—I believe the crops in the several electoral divisions in this district are fairly good this year, which I attribute to the favourable season—May being rainy and June dry. *Swingford D.*—The crops in my district are on the whole good. The potato crop is not quite up to that of 1887, but I consider it better than last year. A good deal of damage was done to hay, oats, and potatoes in the valley of the Moy during the recent floods. *Westport D.*—The crops of this district for past year were medium.

Wexford County. Adlons D.—The potato, oats, turnip, and hay crops, are more than up to the average this year. Owing to the dry summer there is an excellent return in the potato crop. The straw of the oats was a little short, but has fair yield. Hay is plentiful, and of good quality. Some applied to turnips. *Boyle D.*—I consider the yield of the various crops for present year in this district to be, on an average, very good. This I attribute to the favourable season. *Castleknock D.*—The potato crop about a quarter or one-fifth less than last year. The excessive rain in June, July, and August, affected the growth, and caused the difference in the yield. The turnip crop is about the same as last year; but the straw is longer and better, owing to the wet season. The excessive rainy weather during the summer months caused the hay crop to be somewhat better than last year. *Roscommon D.*—The harvest here has been good. Owing to a dry, early summer, hay, although light, is plentiful. Oats, for same reason, is good; and the potatoes are above the average. *Strathmore D.*—The principal crops grown in this locality are hay, potatoes, oats, and turnips. Hay is a fair average crop. Potatoes is about one-third under the average, owing to having been attacked with blight and frost very early in the season. Turnip is a fairly good crop. Oats, a fair average crop.

Sligo County. Ballymote D.—The yield of potatoes is somewhat less than that of last year, owing to the very wet season we have had this year. The grain crop is fair, and the hay crop is very good so far as the yield is concerned; but I am afraid it is not well saved, owing to this wet season. The yield of all crops in this district is fair. *Coltonsey D.*—The yield of all crops this season has been very large, and the crops sound and healthy. The hay crop especially

is extremely large and sound. This satisfactory state of things is due to the favourable climatic conditions which existed during the year. *Sligo D.*—Oats: good crop, would have been better were it not that the season was too dry. Wheat: the same remarks apply, and there is not much wheat here. Barley: The same remarks apply as to wheat and oats. Rye: ditto. Hay: a good crop—favourable season. Potatoes: ditto. Turnips, good. Mangolds, good. Cabbages, good. *Sligo D.*—There has been a good yield of all crops in all the divisions of this district, except one or two, which can be attributed to good soil and

favourable weather. In the places where the yield was light, it was on account of bad soil. *Fahan, county D.*—The principal crops grown in this district are potatoes, oats, and hay. Potatoes are an average crop, especially in good land, and escaped blight until fairly matured. In mountain districts not so good, owing to rain. Oats turned out a fair crop in lowland. The rains of May were in its favour, and August was a good ripening month. Hay has been a plentiful crop, and fairly saved, especially that cut early, due to favourable weather. Turnips, and other green crops, are very good, owing to a favourable season.

PASTURE OF
CONNAUGHT.

APPENDIX.—SILOS.

The following statements have been received from persons who have made Excilium in Ireland in 1882.

PROVINCE OF

[illegible]

AND ENSILAGE.

The names and addresses have been inserted in those cases where permission has been given to include them.

LEINSTER

[illegible]

Name and Residence.	No. of Silos.	No. of Stacks.	Dimensions of Silos—Length, Breadth, Depth.	Materials of Silos.			Whether Drained or Not.	Direction of "Run-way," "Run-way," or "Run-way" Surface.	The Runways have been widened, and how?
				Walls.	Floor.	Roof.			
DUBLIN COUNTY —continued—									
R. Burke, Esq., Hampstead, Ontario.	—	5	10 feet by 10 feet; 30 feet deep.	Grass.	Straw.	Straw.	No.	Above.	It was made in a stack with straw from Farnham.
Henry Wilson, Esq., St. Catharines, Ontario.	—	5	—	—	—	—	—	—	Wicks covered with clay and a few straws.
Edw. J. Smith, Esq., Chambers, Ontario.	1	—	24 feet by 12 feet; 14 feet deep.	Concrete.	Concrete.	Shed.	No.	5 feet below, 12 feet above.	Not in run-way.
KILBARK COUNTY									
W. H. T. Fox, Esq., St. Catharines.	—	5	—	—	—	—	—	—	Yes. In a stack, but only covered with straw and straw on one side.
Rev. J. Tremblay, St. Catharines.	—	5	—	—	—	—	—	—	Yes. In stacks. The corn grass was in an oblong shape, about 4 feet by 2 feet. Some was not pulled up, and then cut off and put on all sides. We want it with corn, put on all sides, and had with clay.
Mr. James Dwyer, Long Point, Ontario. Messrs. the Mc- Gowan of St. Catharines, St. Catharines.	5	—	1. 14 feet by 12 feet, 10 feet deep. 2. 14 feet by 12 feet, 10 feet deep. 3. 14 feet by 12 feet, 10 feet deep.	Sheds.	Concrete.	Sheds.	No.	Above surface.	No.
Major R. H. L. Moore, St. Catharines.	1	—	24 feet by 12 feet; 14 feet deep.	Concrete.	Concrete.	Corrugated iron.	No.	Above.	Yes. In a stack weighed.
T. O'Connell, Esq., St. Catharines.	4 in all.	—	12 feet by 12 feet; 10 feet deep each.	Concrete.	Concrete.	Iron.	Yes.	Partly below, i.e., 5 feet of wall, so as to prevent high level of water from in.	No. Too weak.
Frederick (Kingston), St. Catharines.	—	1	40 feet by 20 feet; 20 feet deep.	No walls.	Surfaced grass bed.	1 foot of subsoil earth, and sur- face earth.	Shallow open ditch round stack, not water it.	Extremely above surface. In solid where grass is cut, either on surface or in a ditch to save cut- ting wet heavy grass.	Yes. In stack, it was made in a run-way with straw from other heavy run- ways. It was made in a run- way or outside of run-way, but should be per- fected. Of course the size of stack depends on the quantity of grass in it. In 3, the quantity of grass is less.
F. Foster, Thos. H., St. Catharines.	—	1	—	—	—	—	—	—	I made it in a stack, 10 feet by 10 feet, 10 feet, and grass by James's rule.
KILBARK COUNTY.									
James Brown, Esq., St. Catharines.	—	1	8 yards by 4 yards; 10 feet deep.	None.	Solid earth.	Firm covered with planks, then whitened with lime, and topped with straw hay, 40, 10 feet, 40, 10 feet.	Small one round stack to take off water.	On the sur- face.	Grass bed, and very rich, and every additional 100 of grass put on with a new mow and it is released.

PROVINCE OF

[illegible]

LEINSTER—continued

Number of days occupied in grazing the stock or making stock.	Material put in the stock or made.	Temperature.		Quantity of feedage in lbs. given to cattle per day.	To what description of cattle: if so, horses, sheep, and how much.	Remarks.
		Greatest heat.	Average heat for first 10 days.			
12 days.	Stack green round hay, some straw, some clover.	Did not take care of the temperature.	the temperature.	As much as they will eat.	To every cattle, and to young horses and sheep with them.	The weather this year is much better than what I made usually in the same way in 1888. In 1888 it was put together very well: in 1888 it was put together dry, with only the juice of the grass. Less water on the sides and top this year, only about a bushel were on top and about 1 bushel on the sides. Both cattle and horses are very fond of it, are doing well, and no waste.
18 days.	About 4 acres (1/2) of very good grass.	I do not know what to try for want of time, etc.	as I was un-	also, with other feeding.	Cows in calf and with cows, 2 year old, yearlings, had not any for horses.	To explain fully—when all the grass was brought in and pressed, there was large stacks of hay and put on. I was happy with several hay the rich or stack to keep well or well from it. After three months I open and give it to cattle. I may remark the weather I have this year and last year, the cattle eat greedily, and no much is given.
From 10 days to 12 days, 12 days, 12 days, 12 days.	Wheat, grass, weeds, clover, etc., and in some cases other crops.	—	Not ascertained.	Not weighed.	Two-year old cattle; not in horses.	Put to cattle (cattle) on the grass. The stock put in stacks was very inferior and would have been entirely useless for hay. Cattle eat the weather well and are thriving on it.
—	—	—	—	—	—	I nearly put some boards on top of stack when made, and some were driven to the height of 1 or 2 feet on top to keep off rain; no other weight. I did not take temperature nor measure quantity given to cattle. When stock was put the weather was very good (cattle), but there was a good deal of waste on sides. Cattle eat this greedily. Weather was made of grass from under trees already.
—	Grass.	—	—	About 10 lbs.	1/2 year old bullocks.	The weather used was made in 1888. The cattle eat it fairly well, but left more waste than in 1888.
About 10 days.	Grass, clover, timothy.	Not tested.	—	About 10 lbs.	Store and dairy cattle.	—
11 to 12 days.	Chiefly rough grass.	—	Never registered.	as to the for dairy cows.	Dairy cows and sheep.	Did not in 1888. Last season being favorable for hay-making we made no weather, so we prefer say the feeding if it can be saved without rain.
Less than 10 days.	Grass, clover, and some in the stack.	—	Not tested.	About 10 lbs.	2 year old cattle, young bullocks.	The cattle got a fair supply of hay with the weather, and they improved satisfactorily.

Name and Residence.	No. of Silos.	No. of Stacks.	Dimensions of Silos—Length, Breadth, Depth.	Materials of Silos.			Whether Destroyed or not.	Situation of Silos—“Partly Below,” or “Above” Surface.	How Stacks were made without a silo and how?
				Walls.	Floor.	Roof.			
KING'S COUNTY.									
Robert J. Walsh, Esq., 27, Myrtleway, Rosetta, King's Co.	-	3	-	-	-	-	-	-	-
Ed. Ross, the Earl of Ross, River Castle, Duncannon.	-	-	-	-	-	-	-	-	-
Jonathan C. Dorcy, Esq., 17, Long Castle, Roscrea.	3	-	20 feet by 12 feet; 22 feet deep.	Brick masonry, lined with Portland cement.	Clay.	Wood and corrugated iron.	Not.	Below.	No.
			under by 12 feet; 14 feet deep.	Do.	Do.	Do.	Do.	Do.	Do.
			30 feet by 12 feet; 16 feet deep.	Do.	Do.	Do.	Do.	Do.	Do.
W. P. H. Lloyd-Frangias, Esq., 60, Ouliffe Green, Roscrea.	1	-	-	-	-	-	-	-	No change since last return.
Edward Jackson, sen., Esq., Fermilham, Roscrea.	1	1	12 feet by 12 feet; 12 feet deep.	Stone and mortar.	-	Roofed and lat.	Partially dry.	Below surface.	A small stack, which was constructed owing to the small size of stack.
John Jackson, Esq., Roscrea.	-	1	24 feet by 12 feet; 4 feet deep.	-	-	-	-	-	When it was covered with straw and cut, over matted to split.
W. E. Treach, Esq., 17, Redwood, Lurton.	1	-	A slated house; walls constructed 20 feet by 12 feet; 12 feet deep.	Masonry.	Gravel.	Slated.	No.	All above.	None this year.
Henry O. White, Esq., 47, Charlesville, Roscrea.	-	1	-	-	-	-	-	-	Excellent made in stack in field.
Anthony J. Robinson, Esq., Coddery, Roscrea.	-	1	-	-	-	-	-	-	Simply driven in a circle made in field where straw grew, and was thatched over with straw and about 2 feet deep of dirt.
Reginald Digby, Esq., by Right Hon. Lord Digby, Gussell.	3	-	20 feet by 12 feet; 14 feet deep (actual)—each.	Concrete.	No. 1, Concrete; No. 2, Natural gravel.	Corrugated iron.	Not.	Partly below.	Not this season.
W. Adams, Esq., Tullamore.	4	8	20 feet by 12 feet; 16 feet deep.	Concrete.	Concrete.	Galvanized iron.	Not.	10 feet below, 4 feet above surface.	Stacks 16 feet in diameter, and covered by glass's interest. None this year; but expect that I will be about to construct all round country. I think it best to construct such the silos plan, as it is the best plan upon the whole. I will make them this year only if the price.
			20 feet by 12 feet; 20 feet deep.	Do.	Do.	Do.	Do.	12 feet above surface.	
			40 feet by 16 feet; 11 feet deep.	Do.	Do.	Do.	Do.	4 feet under, 7 above.	
Edw. A. O'Leary, Esq., 17, Ouliffe Green, Tullamore.	-	1	20 feet by 12 feet; 12 feet deep.	-	-	-	-	-	Made in open field. Grass, &c., tramped on stack every second or third day until all was in. Stack was then about 20 feet in diameter and covered with mechanical press and a few feet of straw.

LEINSTER—continued.

Number of days elapsed in silage being made or making stock.	Materials put in silo or stack.	Temperature.		Quantity of ensilage in silo, given to Cattle per acre.	To what description of cattle; if to horses state so, and how much.	Remarks.
		Current Rank.	Average Heat for first 10 days.			
—	—	—	—	—	—	I cannot give any of the required particulars, but the cattle got precisely the silage in the two stacks, one of which was made in 1894, but not used till last winter. Both stacks over their average live weight of about 12 inches of water (which also included the rain) placed upon them.
—	—	—	—	—	—	I beg to say that no change has been made in any silos since date of my previous report. Only two of the three, however, were filled last season, it being considered cheaper and better to make hay in dry weather.
Four to five days.	Old meadow grass.	About 80° Fahrenheit.	—	About 15 lbs.	Store cattle, to-wit: butlers' horses, about 20 lbs.	Ensilage remarkably good and sound; little or no waste; kept some from last season, 1894, and is perfectly good. Cattle have been their condition well, especially three-year-olds better. Took particular notice that weight not less than 20 lbs. in square foot is necessary for at least fourteen days after last filling, and then can be reduced to about 15 lbs. or less.
—	—	—	—	—	—	I left one silo, about 15 feet by 15 feet by 5 feet, filled July, 1894, unopened until July, 1895, when I took out the last silage and hay (about 8 inches deep); I then filled it to the top again; in two days put on the water (steam), and opened it last December, when I found it of excellent quality.
One day at stack.	Second crop silver grass.	—	Kept at constant.	As much as they would eat.	Found it valuable for following sheep and above cattle, but horses refused it.	I have been making ensilage for three years, and find it valuable for spring feeding, as cattle going on grass do better than if fed on straw food previous to going out.
About 10 days.	Old meadow grass.	—	Not known.	Not known.	Store cattle and sheep.	It was silaged and used except some on outside; not considered so good as what I made other years in a silo. This was first trial in open, and will be discarded.
—	Ordinary to a 60° grass.	—	—	1 to 2 stones in the field, and less for cattle in houses.	Store cattle and milch cows.	Season was very dry, and haymaking went on almost without interruption from last weather. I had got off making stacks some time in this, supposing that but hay weather would answer for them. I am sorry not to have more silage this year on this farm.
Seven days.	Old meadow grass.	—	—	As much as they can eat.	All black cattle and young horses.	I am now feeding cattle with ensilage kept over in stack since 1894, with no appreciable loss or waste.
Five days.	Clay and second crop meadow.	Not known, but so hot that you could not keep your hand in it.	—	About 15 lbs.	Active year old horses.	Last year I made a large ensilage stack, and in making it the horses drew up the grass. It was covered with about 12 inches of hay, and then packed with hay. The quality was a second quality, and brought first price at a competition in the North Tipperary and King's County Farming Societies' contest. Temperature in March, to 60° Fahrenheit.
Over 10 days, as the rain was so much in the silo, with the weather so hot in the morning.	Old meadow grass.	Not taken.	—	The ensilage is given to cutting silage cattle on the grass, alternately with hay.	—	The ensilage this year is exceedingly good, with very little waste, having been put in in a moderately wet state. In one silo there is about 4 feet of ensilage laid over from the previous year, and there has been no deterioration in it.
4 days first silage, and 1 day second.	Grass and water in silo, and a 60° grass in the silo.	—	—	Small feeding, one foot, 11 lbs. for other two loads of chaffed hay and turnips.	Three year old bullocks sent to horses.	All my ensilage was very good this year. I intend making more ensilage this season. I have 8 acres of 17½ silos, and bullocks, 10 and 12, as I found that ensilage makes the best silage. I weighed all my silos, which filled, with horses, 100 lbs. in square foot, after using Turner's roller.
—	Trichee and oak, silver and old meadow grass.	—	—	As much as they eat in one load.	Store cattle. When it does not last long enough we consider it useful for horses.	Trichee and oak mixed made good ensilage; also green. Old meadow grass was used in one silo, where hay and straw were used. From two years' experience I find that old meadow grass makes the best silage in a square foot. It is much more economical to make hay of any grass. Waste on silos of stack, 1 foot. A concrete silo is very desirable, and requires less labour in filling and pressing.

Name and Residence.	No. of Silos.	No. of Stacks.	Dimensions of Silos—Length, Breadth, Depth.	Materials of Silos.			Whether Drained or not.	Situation—Below, or Above, or on Surface.	Has Ensilage been made within a year or two?
				Walls.	Floors.	Roofs.			
LOREFOORD COUNTY.									
" " "	-	1	40 feet by 14 feet; 14 feet deep.	—	—	—	Not.	Above surface.	By Fennell's roller.
J. M. Wilson, Esq., J. P. Carrington, Silo-workmen.	-	1	—	—	—	—	—	—	Yes, in a stack, by the same method as last year, viz. by Fennell's roller, and also a good amount of loose-worked by men walking on the stack.
Colonel Robert Campbell, Colchester Mass., Silo-workmen.	1	-	37 feet by 14 feet; 14 feet deep.	Brick.	Paved and flagged.	Shingles.	Not.	Partly below surface.	Yes; made in a barn of the dimensions mentioned.
Mrs. M. Magan, Kilsbarn.	-	1	40 feet by 14 feet; 4 or 14 feet deep.	—	—	—	Drained.	Above.	Yes. The grass is being cut and watered to stack, and then built up as a roof, being thoroughly tramped, well watered, and tramped, and the sides are made out. The grass was cut on 10th day of previous month or 10th day of last year, and put on stack any time the stack was made it was worked at intervals of 10 days, and then was ready.
Mrs. Thomas Kelly, Oak, Kilsbarn.	-	1	—	—	—	—	—	—	Build in the field in stack. At first no more of last year, which was cut for a few days, was built and allowed to settle; then under two more of the mow was piled by degrees; finally all was heavily weighted with stones.
John Wilson, Esq., Indipolish, Kilsbarn.	-	2	35 feet by 12 feet; 6 feet deep; circular; 27 feet; open field.	Outside layer of grass about 1 foot 2 inches.	Build on earth or surface of field.	Grass grown over which was put straw, 14 inches of hay and straw, and straw.	Not drained; a dry part of field selected.	Above barn.	Yes; by making a stack.
LOUTH COUNTY.									
Major-General C. B. Wilson, J. P. and J. P. Wilson, Castlebliss, Co. Wick.	-	2	(1) 40 feet by 14 feet; 4 feet deep; (2) 40 feet by 14 feet; 4 feet deep.	—	—	—	—	—	Without a silo. By Fennell's roller system, in one stack, on dry surface of field; other stack having been built over one stack.
Mr. Thomas Lavery, Howard, J. P. Wick, Wick Abbey, Wick.	1	-	40 feet by 14 feet; 4 feet deep when settled.	Wall on one against back.	Clay.	Hayrick built on top of silo.	Not drained.	On surface, with lattice 1 foot from each side and 1 foot from other side.	One part made seven days over the other part built against wall; stood six feet high when settled down; made 10th of August from putting had working on the silo; and also grass as good as ready to lay up to season.
John N. Davis, Esq., Garry Farm, Wick.	1	-	40 feet by 14 feet; 14 feet deep.	Stone.	Tile.	Shingles.	Not.	On surface.	Was made in a wall by connecting the grass well between the walls as it was made in. It was made in 18th and put weights every night and loaded with straw of heavy weight of stones.

Name and Residence.	No. of Blows.	No. of Shells.	Dimensions of Hole—Length, Breadth, Depth.	Materials of Hole.			Weather Drained or not.	Situation, "Dry," "Partly Moist," or "Above Surface."	Has Burrows been Made or about a hole, and how?
				Walls.	Floor.	Roof.			
LOUISE COUNTY—continued.									
Dr. J. H. Taylor, Esq., Dundalk.	-	2	-	-	-	-	-	-	Soft as rich loam built in parts by 1/2 inch.
WEAVER COUNTY.									
Bernard W. Taylor, Esq., Albany.	-	2	-	-	-	-	-	-	Shells made in a round heap in field 20 feet across 4 feet deep, and covered with 12 inches of soil.
M. T. Rothman, Esq., Bellevue, Connecticut.	-	2	-	-	-	-	-	-	Withdrew a hole, 10 inches in diameter, about 10 feet deep, after being dug, tramped during the process, and covered at once with clay—then built up to the surface, either in field in the water, with 2 feet high.
Wm. J. Hopkins, Esq., Middletown, Albany.	-	2	-	-	-	-	-	-	I have three holes, 10 to 12 feet diameter, 2 to 4 feet deep, covered with clay, 1 foot of clay, from 1 to 2 inches of grain in each.
" " "	-	1	-	-	-	-	-	-	Carried in the grass while the cow was in it, and made it into a stack 10 feet high, which was built in the field and covered with 12 inches of soil.
John Weston, Esq., Burlington, Albany.	2	-	10 feet diameter, 2 feet high. 20 feet diameter, 2 feet high. 21 feet diameter, 2 feet high. 22 feet diameter, 2 feet high. 23 feet diameter, 2 feet high. 24 feet diameter, 2 feet high. 25 feet diameter, 2 feet high. 26 feet diameter, 2 feet high. 27 feet diameter, 2 feet high. 28 feet diameter, 2 feet high. 29 feet diameter, 2 feet high. 30 feet diameter, 2 feet high.	Each hole.	Surface of field.	None.	Not.	Above surface.	No.
Mr. Thomas Davis, Lord Steward for High Sec. Lord Chancery, Kentucky Castle.	-	1	-	-	-	-	-	-	In round stack 10 feet in diameter, 10 feet high, covered with soil, and built up to the surface, either in field in the water, with 2 feet high.
High Sec. Earl of Argyll, Albany, Kentucky.	-	1	-	-	-	-	-	-	I have deeply buried up about 10 feet of soil, and built up to the surface, either in field in the water, with 2 feet high.
J. L. Sayer, Esq., Albany, Kentucky.	1	1	10 feet by 10 feet, 12 feet deep.	Bottom half brick covered with cement.	Flashed.	Wood complex, with clay, and wood plank 4 feet above top of wall.	Not.	10 feet below, 2 feet above.	Yes. In stack, 10 feet high, 12 feet deep, covered with soil, and built up to the surface, either in field in the water, with 2 feet high.

LEINSTER—continued.

Number of days required to fill the silo or stack.	Materials put in silo or stack.	Composition.		Quantity of stock kept in the silo, or in cattle per acre.	To what description of cattle; if to horses, state so, and how used.	Remarks.
		Grass.	Average feed for first 10 days.			
10 days.	Grass.	Not tested.		About 1 1/2 tons, not weighed.	Various cattle, 10 to 20 lbs. horses.	In wet weather, when there would be great difficulty in making hay, I would most decidedly adopt the system of making ensilage, as I consider the properties of feeding and fattening very superior.
Not known.	Grass.	Not known.		14 to 20 lbs.	Given to aged cattle, young horses and is also.	I believe there is more food off two acres of grass than three acres of hay, and cattle do better on it except in cold wet weather. Silage is better feed made in dry weather, and there is considerably more waste.
—	Grass.	—	—	—	Cows and calves, no horses.	I made only two other stacks in 1880. I did not use the silage, considering it more troublesome, costly, and not better than the stack. I had four stacks cut from these—some intended to be sweet, there was considerable loss on, I think by the sun, some getting too high when in process of making. One I am using to try of 1880 and has a lot of twelve full round. The cattle like and thrive on it. I think the grass made is not where full of hay, before it is downed. The best ensilage I have made was after cutting the cattle off the field in the middle of June, and taking it up then for ensilage.
From 2 days to 3 weeks.	On meadow grass and faggots.	Never took.	Temperature.	Have used with hay, as much as they will clean off grass.	Have used it three or four years with all kinds of cattle, and have never had any young horses eat it in preference to the best hay.	I have only made ensilage for two years, and find it good, as well as I can judge, at least double the amount of cattle that the same amount of land would be able to feed, because the cattle were in better condition and did better on the grass than on hay. I do not believe anyone can go the wrong in making ensilage, no matter how put up.
4 days.	On meadow grass.	Don't know.	No record kept.	About 2 tons.	Some cattle, not so horses.	I found the stock fed on ensilage during the winter did well on it. They were healthy, and increased faster than those fed on hay.
—	Meadow grass, and thrives off potatoes.	No record.		All they will eat.	Some cattle, all ages.	The silage was not good; was weighted with about 10 bushels in depth of clay cut from trench round each silo. With one exception, the ensilage was of good quality in all the silos.
10 days.	Very coarse herbage of bottom land.	150 degrees.	—	20 tons.	2 year old bullocks in stalls and on pasture.	This stack of ensilage was made from over-ripe coarse herbage, grown on what is termed the potatoed land of Dymock, which has never been previously ground, in any way, for the land in years. We have used the ensilage with bullocks in the stack and are now feeding with it on the potatoes. All eat it greedily, and are doing well upon it.
—	—	—	—	I give as much as they can eat but have no idea of the number of the day I feed to about 10 small heads each day.	Cattle and breed horses.	I am using last year's silage (1880); shall use that made in 1881 next year.
—	Grass.	—	—	—	Increased feeding cattle.	The silage in the silo was very good, with but little waste; that in the stack good when fed with a good deal of waste. Both cows and the calves thrive on it.

PROVINCE OF _____

[illegible]

LEINSTER—continued.

Number of days required in silage or ensilage.	Materials put in silo or stack.	Temperature.		Quantity of ensilage in the silo or in the stack per acre.	To what description of cattle or to horses sold up, and how much.	Remarks.
		Greatest heat.	Average heat for first 14 days.			
10 to 14 days.	OM grass.	Being turned myself so no accurate registry was kept by my hand.	About 10 to 12 in each bush in middle of the day, in one feed.	They got as much as they could eat, and were in extraordinary condition.	Dairy cows, young stock of all kinds. Hens did not get it.	One of the stacks made last year, covered with slush, was so attractive to the cattle which were in the same field that they could not be kept away from it, and continually broke down the protesting fences, descending to within the greatest grass-areas, although there was a fair quantity of aftermath on the field. The silo was principally used for the dairy cows, and has been now working for five years.
14 days.	Grass.	Don't say the exact heat. The stack sank to about one-third the height it would be if the grass had not been.	About 10 to 12 in each bush in middle of the day, in one feed.	Young store steers and stock of all kinds, and milch cows, and some of the day. I did not feed horses on anything. I tried it horses would eat it, and I found they would.	When the season is too wet to make good hay I would approve of ensilage as it is much better feeding than the best hay.	When the season is too wet to make good hay I would approve of ensilage as it is much better feeding than the best hay.
4 to 10 days.	Upland meadow grass.	Not taken.	Not taken.	About 10 to 15 lbs.	All the young calves running out with cattle eat it, and are very much fond of it.	Owing to the very dry summer of 1895 we made very few stacks of ensilage, making hay instead. We had a number of stacks made from 1895 which turned out remarkably well, and seemed to have improved by the extra year's keeping.
10 days.	Old meadow grass.	Temperature not taken.	Not taken.	From 10 to 14 lbs. per day.	Milk cows, and stock.	A stack of ensilage, 10 feet deep by 18 feet wide and 3 feet high, made in July, 1895, of good green old meadow grass, is now being given to cattle. It is as good as or fresh as it could be, and much better than what was made in 1894, because the grass was greener, made earlier, and better sorted.
10 days.	Nothing but grass.	Impossible to take exact temperature.	Not taken.	As much as they will eat.	Both fat and store cattle; none in horses.	—
10 days.	Upland and meadow grass.	140 degrees.	110 degrees.	About 10 lbs. according to size of head.	Fat and store cattle; none in horses.	I make all round stacks 10 feet in diameter, taking advantage of any hill in the field to make the stack under the hill, for ease to the horses carrying up on the stack, making the stack about 20 feet high, and cover with 3 feet of earth, which I find to be the best preserver.
—	Meadow, corn, and vetches.	140 degrees.	140 degrees.	10 lbs.	Store cattle.	Kept two silos over to second year; very good.
A straight from the stack.	Grass from trees.	Not taken.	Not taken.	14 stacks.	To a year old up to horses.	Did not find last year owing to very dry season, and hay being really made.
8 or 10 days, with break between over and under.	10 tons grass.	140 degrees, F.	Average below normal.	About 10 lbs. given once a day, with hay at night.	Store cattle and cows.	Two cases of abortion set down by my ranchman to use of silage, which may possibly have had something to say to it, as the stock system quite out of the silage system, and is decidedly purgative. This is my third season's experience of such effects, and while I think the usual food, especially an alternative, and of importance in our changeable climate as a means of making a stop in bad weather, I am however, of opinion that good, well-made hay is relatively preferable to feeding them food or even silage, but I do not see how to avoid this on stage if not supplemented with hay or other feeding.
10 weeks, when water was put in the silo.	Grass.	Not known.	Not known.	As much as they would eat.	Primarily dairy cows, young stock, sheep.	I put one down each full of water along the sides, to bring down the grass, and as the roof is straight, I take off all water when full; as water along walls at all, put some on top, from 1 inch to 1 1/2 inches at 10 inches at all. I find over no head on the water on the silage, and cattle did not.

PROVINCE OF

Name and Residence.	No. of Stacks.	No. of Stacks.	Dimensions of Stacks—Length, Breadth, Depth.	Materials of Stacks			Whether Drained or not.	Situation—“Below,” “Partly Below,” or “Above” Surface.	The Stacks have made within the year, and how?
				Walls.	Floors.	Roofs.			
MEATH COUNTY—continued.									
Hugh O'Brien, Esq., Tara Hill, Navan.	—	2	—	—	—	—	—	—	My roofings for the last two years has been made with straw. A stack, 30 feet each way, when finished (rough) was 11 feet high, with will within when settled to say 4 or 5 feet high.
Peter Williams, Esq., 25, Morris, Tara, Navan.	—	1	—	—	—	—	—	—	Simply by building the stack in rows, and rows, the grass is made dry when cut, the round stack, about 30 feet in diameter, standing in the field covered with a dry coat of a straw round the stack.
“ “ “ “	—	1	—	—	—	—	—	—	In stack in covered field, 25 feet by 8 feet, 8 feet high.
W. Newman Waller, Esq., D.L., Allenstown, Navan.	—	1	—	—	—	—	—	—	One stack of rushes was made last year, and with no difficulty as in connection with dry weather. The dry weather was good as it is necessary, however, it has been one most satisfactory, and thereby back to what is spoken of.
James Morris, Esq., Knockmore, Wexford.	—	1	—	—	—	—	—	—	We built the stack in the corner of a field, putting the ends of the stack into the two high for the horses, the whole containing the produce of about 100 acres of land. The weight of the stack is about 100 tons.
John O'Brien, Esq., D.L., Castleward, Navan.	—	1	—	—	—	—	—	—	I have made a stack of 20 feet by 10 feet, which I built in a stack, and when finished I weighed it with the only I had there, up to 100 and a half tons as it is.
Michael Johnston, Esq., Bass.	—	1	15 feet by 10 feet; 4 feet high.	One back wall.	Stone.	None; covered with hay and straw.	Not.	Above surface.	By building it up as a sort of building in stone and timber.
Matthew Power, Esq., Enniskillen.	—	1	—	—	—	—	—	—	Well shaken and covered with straw and partly in a pit.
T. Maher, Esq., Enniskillen.	—	1	—	—	—	—	—	—	Made in a stack, 20 feet by 10 feet, 12 feet high, and covered with straw and partly in a pit.
Edw. C. Coddington, Esq., Old Bridge, Drogheda.	—	1	—	—	—	—	—	—	Endings made in stacks, 30 feet by 10 feet, 12 feet high, and covered with straw and partly in a pit.

REINSTER—continued.

Number of days completed in using this or making stock.	Materials put on this stock.	Temperatures.		Quantity of feedings in lbs. given in cattle per day.	To what description of cattle, if so known state so, and how much.	Remarks.
		Ornament Stock.	Average Heat for first 10 days.			
Advent 10 days.	Old meadow, from May 4 to 17, 1880, well mowed as above.	—	30 to 35 de- grees.	What would have.	Three year old and 4 calves.	My idea is that there is no better feeding for cattle, with a little corn or clover, when given in shade or in spring. Cattle is not required when given on fields.
Advent 10 days.	High old meadow grass.	I cannot answer this ques- tion. Temperatures controlled by weight of material put on.	—	I give a large quantity and try to make it very weak.	Black cattle, including calves and heifers. I do not give it to horses or sheep.	I do not think my cattle did nearly so well this year as last year, though they ate it greedily—the only reason I can give is that the climate this year was made of very much dry, rich grass. I observed that some of the animals needed a good deal, which was not the case last year, when the weather was made of moist grass.
Advent 10 days.	Grass.	Do not know.	—	Do not know.	Two year old and not so large.	—
Advent 10 days.	Old meadow, 1880.	1880 degrees.	1880 degrees.	1880 lbs. with some hay.	Two year old calves and heifers. These to horses.	Cattle liked sweetfeed better than hay, and improved much on it.
—	—	—	—	—	—	When about half made I think we lowered an interval in this work before we completed the covering in of the grass. We had showered an interval of a few days for it to settle at a certain level before we began it with the bags of timber. We covered it with tobacco, hay, and refuse. It kept sweet from bacterial rot, until the present time. It is not all laid up yet. We give it in case of all sorts, from a growing and upwards to fresh cows. Young horses in the stable also eat it. Everything grows well on it, except a small lot which appeared to rot. I don't think the material of which it is composed, but— clover, rye grass, or some good old pasture grass, and the two and greater it is put together, the better the cattle will eat it and thrive on it. I believe the practice of a given amount made into silage will feed more cattle than if made into hay.
All intervals during 10 days.	Ordinary meadow.	No temper- ture taken.	—	About 10 lbs.	Large, including calves, and well finished horses.	This is my second year in using sweetfeed, and am so pleased with it that I purpose making it more extensively in future. I con- sider it gives a much larger quantity of feeding than it made two years. My cattle fattened well on it. Last year I gave it to some cattle they did not like on it. I suppose I could not spare them more than this year.
10 days.	—	Have not ascertained.	—	10 lbs.	Small, including calves, and well finished horses.	During the time I was covering the grass I had placed with weights on at night, and also used a lot of quantity of hay and straw on.
10 days.	Grass, old meadow, and hay.	I took no heat has quantity.	—	I give no other feed to them.	Three year old and one calf.	This is my second time but this summer I intend to put in a lot with the water not sweet, but with as little, and to cover with clay. I am of opinion that the first layer of clay would be puffed and tamped to prevent rotting, and not less than a foot deep.
10 days.	Old meadow grass.	The lower the did not.	—	From 10 to 20 lbs.	Three year old calves and cows.	I consider that cattle do very well on it, and that it is better to make sweetfeed of young clover grass, than as grows on low- lying land, from hay. I think it is at very little cost in small quantity, as there is so much water when made in small quantities. I think the water better than the sweet. The stock when satisfied requires to be covered, usually with at least 10 to 15 inches of dirt, which serves as a protection as well as to keep the silage from getting too much rain. On the whole, it was pro- perly made, I consider it cheaper as well as better feeding than hay. There are much finer of it, and it is more digestible and wholesome than hay, or than a small red clover feed.
10 days from the time when the silage was made for the work.	Grass from woods and pastures, also a quantity of bush clover.	When stopped for 1 month, lost 10 to 15 degrees.	—	Two year old calves, 30 lbs. heifers, 10 lbs. 1 year old, 7 lbs. 1 year old, 7 lbs. 1 year old, getting a little less.	All growing stock.	Wrote on silage and on it, including. Quantity of stock very good, but not in order, when as long away from work, get a little over- fed and was rather better, but cattle seemed to like it all very well.

PROVINCE OF

[illegible]

LEINSTER—continued.

Number of days required to finish the making stock.	Materials put in this or stock.	Temperature.		Quantity of ensilage in ton, given to cattle per day.	To what description of cattle: it is known state so, and how much.	Remarks.
		Greatest heat.	Average heat for last 15 days.			
—	—	—	—	As much as they would eat.	Milk, young stock, & young horses.	I kept no account of particulars, but just worked away at it to win my time. I found that cattle, horses, and sheep preferred what is called sweet ensilage, made without weight, that was my reason for not weighing but hay. I was not intending to have made any last year, after that I had a small portion of more that was not forward enough to cut early in the year, and so not to alter harvest.
About 14 days.	Best old ver- dure grass.	—	—	As much as they could eat.	Two and three- year old bul- locks.	In making them, I used about 15 bushels of good old wheaten, drawing it with three horses for a day or sometimes two, but not more at a time, and then leaving for a day, when the next day's drawing finished what was left over. When finished, I loaded off with some old refuse hay, which seemed to im- prove by its elevated position, as cattle eat both hay and ensilage most liberally the following spring.
About 10 days offal on.	Old meadow, dry grass.	Work as temperature.	—	Never weighed it; but give them as much as they will eat.	Store cattle; no horses.	We used no pressure; when risk got inconveniently high, we letting it down till it reduced. We covered it with straw, with oak bark, and over these put 12 inches of earth. Owing to the time it was cut the grass was rather dry, and the ensilage was not quite as good as bread. There was about a foot waste at sides and ends at top.
8 days.	Secret of peas and oats, 15 acres of old meadow grass.	—	—	—	Cows and young stock. It has been given to farm horses on previous years, and would have the best hay for it, but this year I had 6 bushels more, they all had their field.	The cows would all go on as soon as they saw the part above the straw. It is good for milk, increased not to top or left where the cows are milked, though they may be led with lead or having been milked.
About 10 months.	Grass, wheaten, and oats, &c.	Do not know.	—	As much as they would eat.	A large number of store cattle and young stock, and in some, and are in good health condition.	Slaps, after green; between sweet and sour; nearly none at bottom of tank; very little waste at sides; none at top, as the stock was covered with some straw refuse grass and wrote out of plantations, and only one top layer was used and it was only 15 for measure when put out. The result from the above process given the top of stock and the system competition from the heavy pressure are sufficient to keep off rain; so no cover or tank is necessary. It requires water out, and water in water in.
Three weeks.	Grass.	Not tried.	—	About 20 lbs.	2-year old bul- locks.	No weight put on grass in silo; it lies on top when the cut in good order. Stock weighed, but at least 15 bushels round the edge was dry and spoiled; the particles in dry weather much the best; some before that got sick, waste with mould.
8 months.	Old meadow grass.	—	—	As much as they are to eat.	All cattle and horses.	Find ensilage excellent fodder for all cattle. I made about 200 bushels in 1883.
—	After green, young grass, milk.	—	—	—	Store cattle only.	Last season, being dry and most favourable for haymaking, was consequently a bad one. I only had one of my silos, the smaller one, which is now being drawn from. The quality is excellent, the best I have ever had or seen, and will be a particle of waste.
Two weeks.	Grass of old meadow grass.	Not taken.	—	Not ascertained.	Stock stock of all ages.	I have been using ensilage for the last few years with my stock, and am well satisfied with the result; and more, I consider there is a fourth more of feeding in it than there is in the same amount of the material made with hay. Besides, it takes a few days to make good hay, whereas it requires a wet day to make good ensilage.

LEINSTER—continued.

Number of silos contained in one acre of land or one acre of stock.	Material put in silo or stack.	Temperature.		Quantity of ensilage in lbs. given to cattle per day.	To what description of cattle: if to horses state age, sex and how much.	Remarks.
		General Heat.	Average Heat for first 10 days.			
Thirty heads, about 12 cows, 18 calves.	Meadow grass.	Not tested.	—	Not weighed, the cattle get as much as they are able to eat.	Young calves on the land.	I have been making ensilage in stacks for seven years. It is much cheaper to make than hay, and cattle thrive better on it than if fed on hay. Two acres of ensilage will feed as much as three acres made into hay. I am going all the ensilage with young cattle on the land, and not otherwise.
—	—	Mid degree.	—	—	—	Last year I only made one stack of silage, 1000 sq. ft., in October, of the coarse grass left by the cattle season. The weather was so late, I could not get my mowers into the field. It was less expensive to do this under the circumstances than make silage. I have not spread the stack, although it is perfectly good. Having plenty of hay, I intend keeping it till next winter to test its keeping quality.
—	We stack on a little soil.	Overlooked by the heat.	—	—	To young horses and young cattle and calves.	About 12 acres in stack. The heap was 16 feet high when finished. When it settled down to about 12 feet. There was about 4 inches left round the edges. It was quite green and fresh at the bottom, on top it looked more dead and was not so good. It was very good, and the cattle thrive well on it. Fed half hay and half ensilage.
Every third day for 10 days.	Good prime, coarse, and good soil.	Not ascertained.	—	From 12 to 15 lbs.	Sorted cattle of all descriptions over 4 months. Horses from 12 to 15 lbs.	Sorted cattle and horses eat ensilage and do well on it; sheep do not like ensilage. Horses are best for feeding, as they do very little waste. The outside of the stack or stock, from 12 to 15 inches, is useless. Also pay for building in three years.
About two months at intervals.	No. 1 Vetches, and second crop hay.	Not tested.	—	About 15 or 20 lbs., with hay at night.	To young cattle, sheep on the field.	Both stacks turned out very well. The cattle seem to like it, though made from vetches better than any other materials I have tried.
—	Meadow grass.	—	—	12 lbs.	Cows and some stock.	As I only came here in November I am unable to say what the temperature was.
Fences.	Green, and a mixture of green grass, vetch, and red clover.	—	—	Up to 12 lbs.	Toa. But not very much.	Believe Pearson's notes to be applicable for ensilage feeding, but consider it not sufficient by itself for a single ration, and as a rule, the stacks of corn and beans requiring more space than grass. Any fine makes good silage with fairly moist grass.
—	—	—	—	—	—	The roller system of making ensilage not having been a success in 1897 and 1898, was not used in 1899. Took over a month to make ensilage 1899. We only worked at it when broken off from hay and other work.

PROVINCE OF _____

Name and Residence.	No. of Mine.	No. of Shafts.	Dimensions of Shaft—Length, Breadth, Depth.	Materials of Walls.			Whether Drained or not.	Situation: "Below" "Level" "Below" "or" "Above" Surface.	Has Ventilation been made without a shaft and how?
				Walls.	Floor.	Roof.			
WHEELER COUNTY.									
Right Hon. Thomas Powercourt, Esq., B.A., Powercourt, Keshiderry.	2	-	No. 1.—100 feet by 4 feet; 4 inches deep. No. 2.—20 feet by 12 feet 4 inches; 18 feet deep. No. 3.—10 feet by 18 feet; 8 feet deep.	Concrete.	Concrete.	Slated.	No.	Above.	All our workings made in this.
George South, Esq., J.P., Lurg, Glenties.	1	-		-	-	-	-	-	-
Philip Mag. Barrington, Esq., Barrington, Ballyman.	2	1	No. 1.—20 feet in diameter; 4 feet deep. No. 2.—10 feet by 12 feet; 8 feet deep. No. 3.—10 feet by 12 feet; 10 feet deep. No. 4.—10 feet in diameter; 18 feet deep.	None.	Ground.	For shaft is cut in the center; 4 feet in diameter. All covered with a bed of clay.	No.	Above ground.	No. 2 was made in a old well; 3 was made in a well. No. 1 and 3 were simply made in the center of the well with other layers all well covered. With the other two cleaned work, it is necessary to use a primary and a help the process.
Chas. W. Weston, Esq., J.P., Glenties, Glenties, Antrim.	-	1		-	-	-	-	-	It is covered with in the field, raised with stone and finished.
W. F. Littleale, Esq., J.P., Whiteley Abbey, Ballyman.	-	1		-	-	-	-	-	Yes; in a shaft, used in town, with a low on top covered over by weights made up of stone and iron, &c.

PROVINCE OF

CLARK COUNTY.									
Thomas Rice Barr, Esq., P. O., P. L., Phila- delphia, Pa., Ohio.	-	1	-	-	-	-	-	-	In stack—entirely lost. 3 feet deep— will rot.
Mr. F. S. Brown, Esq., Manager, Mr. Rice, Mrs. S. J. Ford, Phila- delphia, Pa., Ohio.	-	1	-	-	-	-	-	-	No silo, but surface made in soil, 10 ft. deep. 15 feet wide and 15 feet deep. Will rot on the side. 4 feet high, and stone from 1000 feet—will rot on the side.
Dr. J. T. Lloyd, Jr., Thamesbury, Lodon- shire, Ohio.	-	1	-	-	-	-	-	-	With Thomas's silo, 15 feet high, and 15 feet wide, and 15 feet deep. Will rot rich soil on the side.
John Shire, Esq., Oskana, Ontario.	-	1	-	-	-	-	-	-	Yes. I had cut stack 15 feet by 15 feet, 15 feet of ground, and 15 feet high, making the silo well, but it was not cut, and was not so high, when I had 1 covered it with a layer of clay, and put it with resin.

LEINSTER—continued.

Number of days elapsed in making the ensilage.	Material put in bins or stacks.	Temperature.		Quantity of ensilage in tons given to cattle per day.	To what description of cattle; if to horses, state sex and how much.	Remarks.
		Greatest.	Average from day to day.			
About 10 days.	Wetted grass cut in green grass.	120 degrees.	120 degrees.	—	Milk cows and young cattle and sheep.	There is not two inches of waste on top of any of the silos. The grass is put in with scarcely any tramping except wind the silos. It is carried on rails or low every day for at least three weeks. By this method we find we can produce a really fine silage every stage. This season it smells and looks like well-saved hay. It is only one of the silos in No. 2 silo, and by way of trial the new stuff was filled in over it in late and today with April. We are using it and find it fresh and good, only a little thick at the edge of the last year's silo.
—	—	—	—	—	—	I have no information with regard to ensilage to give in addition to that furnished last year and the year before, except that having tried green feed in a silo I have found it very poor food, although more cattle don't seem to eat a good deal of it, and I don't see persons with it.
From 10 to 15 days.	No. 1, good old meadow grass. No. 2, same between grass.	Took no measurement.	—	About 4 tons to cows, 2 to small stock.	Milk cows, stall-feeding, and two-year old horses got some. Don't think they	No. 1 and 2 I consider quite successful, not much waste, the silage being thrown up off once. When hay can be had it is too good, but to put a risk on top to keep put rain, but it is not necessary. No. 3 has one made like a draught. I have found a too much waste. I am perfectly convinced that No. 3 is the best, cheapest, and easiest way to make ensilage and that it is a first rate piece of silage and more bottom grass; so could not do better silage quite unnecessary. No. 1, 2, and 3 were made in Kil-dare; No. 4 have in May.
From 10 to 15 days.	At 100° F. and 120° F. in the end of December.	—	—	—	Milk cows.	Ensilage very good, between sweet and sour.
From 10 to 15 days.	Wet grass.	120 degrees F.	Chit's up.	12° F.	Feeding bullocks and horses.	The ensilage was of a dark-brown colour, which would be classed as sweet ensilage I think. The silos are still very fresh and there was no waste when they were getting it. They seemed to me in when we had used it.

MUNSTER.

No record kept.	Wetted meadow grass.	No record.	—	Wetted cattle and milk cows.	The silage was made in the open field, with Pearson's patent rollers (2nd run). It is good and a marked success, the quality of the ensilage being very good. The grass which composed it was of inferior quality, and would not have made good hay. Young stock, two-year-olds, and adult cows eat it with great relish, and it has maintained them in very good condition throughout the winter.
About 10 days.	A rough description of grass of meadow land.	Not noted.	Between 10 and 12, each hour.	From 10 years to 1 year old bullocks, and young horses wintering out.	After several years' experience I consider ensilage to have stood the greatest test for the British farmer. It saves waste, stock eat it readily, it is easy to make, and the grass which composed it would be improved by stock, it is made quickly and easily digested. There is nothing compensated that from the small farmer could not be made of ensilage in making a risk.
Don't want to keep it for 10 days.	Wetted grass.	Never took temperature.	As much as they will eat.	Milk cattle before left by milk cows given to young stock, and by young stock.	I have no recollection of silage; have only about one inch of silage on top, and a parcel of bottom and very little of the silage and milk, but when it is put in the first two years, at first I used to have silage and milk given, then the silage was thrown to the milk and very little has been left by them.
For 10 days.	Grass of an inferior quality.	Did not take the temperature.	I don't know.	To which cows and small stock.	There was about a foot of silage damaged by the action of the air. I gave my own feed daily of silage; it did not do the number of cattle, and had them as well as hay made from the same quality of grass.

Name and Residence.	No. of Stacks.	No. of Stacks.	Dimensions of Stacks—Length, Breadth, Depth.	Materials of Stacks.			Whether Dried or not.	Stacking: "Pole," "Fork," "Daisy," or "A-Jack" System.	The Stacks kept made in (Pole, Fork, and Daisy).
				Walls.	Floor.	Roof.			
CLARE COUNTY—continued.									
Mr. James Scully, Junction, Farnham, Limerick.	-	1	-	-	-	-	-	-	It was made in the form of a steeple, at the level last, by putting with a corner on the side the a broad square 3 and covered it with the feet of straw, and then covered it with straw straw the straw.
Mr. Hon. Lord Dunsany, Dunsany, Newmarket-on-Fergus.	-	1	-	-	-	-	-	-	Stacks—12 feet by 8 feet; 8 feet deep, and 12 feet by 8 feet; 8 feet deep, made up a very surface of good. Absolute height of 12 feet high. One day, and was slowly 12 feet or 12 feet to follow between the legs.
Mrs. Mary Vandusen, Rockingham, Newmarket-on-Fergus.	-	1	-	-	-	-	-	-	Stacks were made in a stack. The grass was used when cut to get ready and laid up, 12 feet high, up a height of 4 feet. The grass was laid up in a stack of three feet, and laid up in a stack of about three feet. When finished, the top was covered with rough straw and weighted with stones.
Captain C. G. O'Donnell, Killybegs, Yell.	-	1	-	-	-	-	-	-	In a stack—12 feet high, 12 feet long, without any aid of preservation. The stack is the same as the others.
CORK COUNTY.									
Mr. M. Connelley, by Mr. Edward H. Connelley, Earl's, Glenties.	1	-	12 feet by 12 feet; 12 feet deep.	Feet of wall 12 inches, built of stone and gravel, covered with straw.	Floor made of stone and gravel.	Glenties, Glenties, Glenties.	12 feet high.	One foot below the surface.	We make our stacks with one of straw on each.
Mr. W. B. Kelly, by the Mr. Hon. Earl of Lonsdale, K.F., Malton.	-	1	-	-	-	-	-	-	Was made in the shape of 12 feet long, 12 feet high, and 12 feet deep. In the end of the stack was made into a stack.
A. H. G. Barry, Esq., K.F., Farnham, Limerick.	-	1	-	-	-	-	-	-	Stack—12 feet long, 12 feet high, and 12 feet deep. It was made up a very surface of good. Absolute height of 12 feet high. One day, and was slowly 12 feet or 12 feet to follow between the legs.
Stephen Gorman, Esq., K.F., Farnham, Limerick.	-	1	-	-	-	-	-	-	In a stack, 12 feet long, 12 feet high, and 12 feet deep. It was made up a very surface of good. Absolute height of 12 feet high. One day, and was slowly 12 feet or 12 feet to follow between the legs.
G. H. Wilson, Esq., Killybegs, Yell.	1	1	12 feet by 12 feet; 12 feet deep.	Flakes.	Concrete.	Slabs.	12 feet high.	Partly below.	Yes. In a stack weighted with stones.

MUNSTER—continued.

Number of days occupied in silaging or ensiling stock.	Materials put in silo or tank.	Temperature.		Quantity of Ensilage in lbs. given to Cattle per day.	To what description of Cattle; if to horses state sex, and how much.	Remarks.
		Ground level.	Average Heat for first 10 days.			
10 days.	Common meadow hay.	I did not try the temperature, but it was very hot.	I never weighed it, but gave them enough once a day.	To milch cows.	As I am a collector for new silos, I found it increased the milk of my cows, for which I am very grateful. I find the same improvement of silaging is able to feed twice as many cows with ensilage as it would be hay; it keeps them more regular in their system. I would not approve of serving it to cattle more than once a day.	
10 days.	Second crop rye grass.	100 degrees.	110 to 140 degrees.	30 lbs. Chaff feeding.	Three-year old steers cattle.	No rollers or saws were used, each subsequent layer being allowed to settle previous to previous one, and finally weighted by pressing it between rollers, one foot apart, and building upwards on top and throwing off water in the ordinary way. Result: a very good ensilage, inclined to sour near bottom.
—	For the stock part some meadow grass; some cut from rougher part, and a little straw, and peas, and beans.	100 degrees. Fair.	110 degrees. Fair.	About 20 lbs.	Shore cattle and young horses; the latter received, nearly the same amount as the cattle.	The chief objection to making ensilage is the waste water, but this can be avoided to a great extent if the silos are made vertical and well equipped to a depth of three feet when grass is loaded. The drainage was readily taken by both horses and cattle.
Made in silo.	Some fairly good grass and some plunking grass.	—	Do not know.	Enough for exactly.	Holsteins and Jerseys; both eat well.	—
10 days required for the process of silaging.	Can be made from meadow grass or from rougher part, and a little straw, and peas, and beans.	Never tested.	—	110 lbs. each head with other material.	To all descriptions of horses and cattle, never used it.	The grass was cut short by a two-horse power machine, placed convenient to the silo; two men feeding machines; two men filling the bins; two men hauling up by rope and pulley; two girls to remove it to where it is wanted. In silo; two men pressing the ensilage by a roller, ten men, on long planks; one man to level the grass before the men rolling, and to pack the surface well.
14 days ensiling.	Old meadow grass.	No record kept.	—	About 10 lbs. per head per day.	1 and 2 year old cattle.	The grass was cut with the mowing machine. On the first two days horses and cattle went over it with loads. When it got too high, men on the ends of rick, and pressed with Pearson's roller filled with water. Covered over with a coat of clay, headed with reeds, and thatched.
14 nights.	Old meadow.	No record kept.	—	About 10 lbs.	To fattening cattle only.	By allowing it to settle for two days and then keeping more grass on top until it was well settled. The silos were built on a level, and silaging was made in heavy rain, and the silos were not covered.
14 days.	Ordinary mixed grass.	Temperature not taken.	—	About 10 lbs.	To 1½ year old cattle.	There was an interval of two days between first and second day's silaging and one between second and third. We give, in addition to silage, about 10 to 12 lbs. mixed hay and corn. Cattle do very well.
14 days silaging, and 10 to tank.	Some grass, some cut from rougher part, and a little straw, and peas, and beans.	Not tested.	—	From 10 to 15 lbs.	Milch cows.	Ensilage is home very good, with hardly any waste; cattle were very anxious for it, and settled wonderfully while getting it. Silage not as good as good as the having been too much.

Name and Residence.	No. of Silos.	No. of Stacks.	Dimensions of Silos—Length, breadth, depth.	Materials of Silos.			Whether Dressed or not.	Position: "Below," "Partly Below," or "Above" surface.	How Stacks are made (whether built and how).
				Walls.	Floor.	Roof.			
COCK COUNTY—continued.									
J. A. B. Newman, Esq., D.L., Drovers House, Midway.	3	-	10 feet by 12 feet; 12 feet deep. Do., . . .	Stone and cement. Do., . . .	Concrete, . Do., . . .	State, . . Do., . . .	Not, . . Do., . . .	Above surface, Do., . . .	None, . . .
C. Arthur Webb, Esq., Quakerstown House, Midway.	2	2	30 feet by 30 feet; 8 feet deep. Two silos each of above dimensions under one roof.	Stone and mortar. Do., . . .	Wood, . . .	Shed, . . .	No, . . .	Above, . .	Two stacks—(1) In Johnson's barn system. A 10-foot stack, composed of various, grain, and mowder grass, made roof stage. (2) A stack about 10 feet, made of mowder grass, port, straw, and hay, made roof stage.
W. D. Webber, Esq., J.P., Muckelstown Castle.	3	1	18 feet by 30 feet; 10 feet deep. 30 feet by 12 feet; 10 feet deep. 30 feet by 12 feet; 10 feet deep.	Stone plastered. Do., . . .	Flats, . . . Do., . . .	Sheds, . . Do., . . .	No, . . . Do., . . .	Above, . . Do., . . .	In a stack, 10 feet by 12 feet by 10 feet.
A. Woodruff, Esq., Nottingham, Oldmire.	-	1	-	-	-	-	-	-	In a stack, 10 feet by 12 feet.
W. F. Ward, Esq., J.P., Dromedary, K. Bough.	1	-	20 feet by 12 feet; 10 feet deep.	Concrete, . .	Concrete, . .	Shed, . . .	Not, . . .	Partly below and partly above.	-
Edgar B. White, J.P., Agitation, Ballacolla.	-	2	-	-	-	-	-	-	With one silo pile simply built in grass, within a the stack, and mowder grass, straw, and hay, made roof stage. The other silo pile is made of mowder grass, straw, and hay, made roof stage.
The O'Donnell, D.L., Limerick, Kilkenny.	1	-	20 feet by 20 feet; 8 feet deep.	Stone and mortar.	Earth, . . .	Galvanized iron.	-	On surface.	It has not been built.
Col. B. W. Ashworth, D.L., Newmarket.	-	1	-	-	-	-	-	-	With one silo, in stack, 20 feet by 12 feet, about 10 feet deep, by one of Lawrence's patent.
Edward Ward, Esq., Ballacolla, Carrigrohilly.	1	-	12 feet by 12 feet; 10 feet deep.	Concrete, . .	Clay, . . .	State, . . .	No, . . .	Feet below, slightly above.	Not in use. The stack is composed of mowder grass, straw, and hay, made roof stage. It is about 10 feet by 12 feet, and is about 10 feet deep.
Col. R. A. Shillibee, D.L., O'Donnell, Dromedary.	-	1	-	-	-	-	-	-	Stacks made of 20 feet, 20 feet by 12 feet, 10 feet to 20 feet under a shed roof. The stacks are made of mowder grass, straw, and hay, made roof stage. It is about 10 feet by 12 feet, and is about 10 feet deep.

* The figures indicate that the house was 10 feet in height. The height to which stage settled down under pressure of planks and ropes was 1 foot.

MUNSTER—continued

[illegible]

² Height of stack when finished, 10 feet; height when worked over, 8 feet. Settlement takes place largely during the filling of well and after.

MUNSTER—continued.

Number of days covered in Silage or Hay/Strack.	Materials put in Silage or Strack.	Temperature.		Quantity of Foodstuff in Tons given to Cattle per day.	To what description of Cattle, if in large state so, and how much.	Remarks.
		Greatest Heat.	Average Heat for first 10 days.			
about 4 days.	Meadow grass and clover and upland grass.	—	—	About 18 lbs.	To Kerry dairy cows.	Straw has been found to be a valuable food for dairy stock. The cattle fed on it are in much better condition than when fed entirely on hay in winter.
4 days.	Plantation grass.	Not observed.	—	51 lbs. to each cow per day, or thereabouts.	Milk cows.	—
Perhaps a week.	Enough grass and meadowing.	Not known.	—	11 lbs.	Shew cattle.	The advantage of ensilage is partly dependent on the weather, both summer and winter. If the cattle are to be the judges, their verdict is entirely in favour of the ensilage.
4 days.	Seeded cuttings of grass and clover.	Did not test.	Temperature.	2 grass (about 4 day, 1 lb. of which; hay in 10 or 12 lbs. 2, 10 lbs. cut all day.	In calf, cross-bred cows and their young calves; did not try horses, but cattle's not in the foreground to very best hay.	—
Did not cover all the cattle.	All the crops grass at bog and down 4 1/2 lbs. 4 1/2 pines.	Did not take and test except with my hand and eye.	—	About 1 stone per day.	To cows and Dr. only.	It turned out a good brown colour with a very nice smell; cows that appear for it, and with horses and some hay, gave good milk and butter. I think it a very good food, probably it shows all as it makes very good feed of stock that would otherwise only do the best.
—	—	—	—	Cattle fed also together on it.	Three-year old heifers.	—
Not days, in August last.	Grass and hay and clover grass.	—	—	About as much as they would eat.	Green, yearling and two-year olds, not tried with horses, but have seen them eat it when at work looking for the cattle.	The largest stack I have now found for two years gives the best results, and the waste is proportionally much less than in a stack, say 12 or 15 feet wide. For the future I shall have made a stack of less size than 20 feet square. Excellent feed, but is certainly not to be made when hay-making is one of the concerns. Horses and cattle are eaten well by cattle when put in stack of ensilage.
Don't say, or it will make only a few more.	Grass.	Never tried.	—	Feed once a day, and hay twice.	Cows and dry heifers, and some to the horses.	I believe ensilage to be a right good, healthy food, and to convert the feeding qualities of dry hay and straw feeding-in fact, is done away with green crops and silage, and here is now 100 per cent. greater than in straw, and is getting more so; but ensilage has come to the farmer's assistance.
4 days.	Old meadow grass.	About 100 degrees.	About 100 degrees.	24 lbs.	Well-fed and more cattle to increase.	I have during the past season stabled 47 head of bullocks and calves partly with ensilage and see greater results. The cattle did well. I wintered 100 head of cross-bred, cross-fed, entirely on ensilage and hay. All have done very well, and have proved that ensilage is a first-class feeding for cattle. I introduced the system into this country.

[illegible]

MUNSTER—continued.

Number of days elapsed in silage or ensilage stack.	Materials put in silage or stack.	Temperature.		Quantity of ensilage in the given or certain per cent.	To what description of cattle, if to horses, state its, and how much.	Remarks.
		Greatest Heat.	Average Heat for 24 hours or days.			
From 11 to 21 days.	Green meadow grass.	Not taken.	Not taken.	Not taken.	Butterick pointers.	I feed ordinary stock in the open, with silage made hard by walling, my three cows on stack at least eat 100 lbs. of silage as fast as it can be put up, giving two sheep and one cow a silage silo in fall, in a barn. One silo made in 1886 turned out a perfect success when opened last December.
About 10 days.	The grass of pastures, and the first and second cutting of about two acres of oats.	Did not test this.	the heat of stack.	About 14 or 15 lbs. besides hay.	Large three year old bellows.	Several of the 10 days were only half days or parts of days. The grass and first cutting of the oats were put together from 1st July to 18th, more grass during the week commencing 22nd July, and the second crop of oats between the 10th and 15th of September. The quality of the ensilage is good.
Perhaps 10 days.	Thistles, rags, and weeds of every sort.	Had no means of knowing.	of knowing.	14 to 15 lbs.	Two year old bellows.	The cattle seem to relish it, and eat every bit of it. Some of the old shewies appeared like shorn sticks.
Many weeks—perhaps 10 days.	—	100 to 120 degrees of heat during the first ten days while making the silage.	I fed my cattle as at outside barn and did not weigh the ensilage to them.	To milk cows and young cattle, and to horses, I used only the horse feeding, and they did not care to eat it.	I found ensilage the best feeding for cattle of every age, but young cattle should get hay with it for the first fortnight, or 10 days, it would do no harm afterwards and young cattle which cows should get hay morning and evening, and ensilage at noon, and 10 weeks give milk, smooth walls would be the best and patient yearlings could be made to eat the best damage. A paved floor, with a couple of paved channels to take away the drainage. It is no difference as to the roof if heavily weighted on the top.	
About 10 days.	Cowens, live, young meadow grass.	Did not test this.	temperature.	About 7 to 10 lbs.	Milk cows.	On account of the dry weather last summer I did not find the ensilage as good or sweet as what I made the preceding year.
Many to each stack.	Grass that grew among trees.	—	100 degrees.	I have never weighed it, gave what they eat.	All dry cows, milks, heifers and calves.	Last winter I fed milk cows on ensilage with good results. When much was touched the soil around it was tramped on the top. I began to use it on the 10th January, 1886, and all the cattle have done well on it.
—	Ordinary meadow grass.	—	—	1 to 2 stone per sheep, on the land.	Large cattle, milk cows, etc.	I think silage are wonderful compared with straw, but they are very useful as they can be had anywhere. I cannot get less than 6 to 8 inches of waste all round sides; very little on the top, say, 2 to 4 inches, rest at bottom. If silage could be made without waste at sides, silage would be very little better than straw. At present I think silage cheapest in the long run, but either silage or stacks are great commodities of food.
About 4 to 6 days.	Shed grass, cut in October and covered tops and straw-grass put in.	Did not test this.	temperature.	About 10 lbs.	To store cattle on the pasture. Young horses feeding with the cattle and it feeds.	I have another silo on another farm converted out of an old house, but owing to walls being plastered with mortar instead of cement, the stack of the silage gets hard into the walls, so don't use it now. Silage or straw is not used in the winter. I have made silage for the last six years or more, and approve very much of it.

Name and Residence.	No. of Rices.	No. of Stacks.	Dimensions of Rices—Length, Breadth, Depth.	Materials of Rices.			Whether Drained or not.	Situation of "Rice" relative to "Water" or "Air" or "Surface."	How Rices have been made without Rices, and how?
				Walls.	Floor.	Roof.			
TIPPERARY COUNTY—continued.									
W. T. Treach, Esq., J.P., Redwood, Limerick.	1	-	34 feet by 12 feet; 12 feet deep.	Stone and mortar faced with cement.	Clay; no preparation.	Curved iron roof on poles 2 feet clear top of side.	No.	Partly below; excavated against side of steep slope.	Not on this Rice this year.
Henry P. Bridge, Esq., Eagle Park, Monaghan.	-	2	-	-	-	-	-	-	In stack, stored away by means of long poles.
Mr. James Griffin, for Nicholas Kennedy, Esq., J.P., Dublin Castle, Mitchelstown.	-	4	-	-	-	-	-	-	We have no other here, simply upon stone, and pressed in future's rice system, which is simple and inexpensive, and the rice, 2 yards by 4 feet by 2 yards high where needed, was made without the roller, simply by foot pressure in damp weather.
Stephen Mann, Esq., D.L., Narine, Clontarf.	1	1	20 feet by 8 feet; 20 feet deep.	Concrete.	Concrete.	Iron-plate of the roof.	No.	Partly below.	In a stack as wide as the field, about 10 feet long and 10 feet wide.
Mr. Thos. Eglinton, Howard St. (see No. 1), J.P. George, Esq., Keshcarrone, Clontarf.	-	2	-	-	-	-	-	-	Perhaps has been made in some unimproved way with clay, but No. 1, 12 feet to 14 inches, is not high when built. No. 2, to be high when finished.
W. B. Farley, Esq., J.P., Greenfield, Tipperary.	-	1	-	-	-	-	-	-	In a large stack, 10 feet by 10 feet, built up on 4 different concreteen heights of 12 feet.
John Bolton Maury, Esq., J.P., Ballywin, Tipperary.	-	2	-	-	-	-	-	-	Three stacks made in open field in one summer in a high field is usually made.
Wm. M. Armstrong, Esq., J.P., Monaghan, Thurston.	1	-	40 feet by 12 feet; 11 feet 6 inches deep.	Limestone, lined with concrete.	Broken stone foundations and concrete.	Galvanized iron.	Not necessary.	Partly below.	Not during past year.
Lt. Col. Wm. A. Birk, J.P., Heywood, Clontarf.	-	1	-	-	-	-	-	-	Perhaps has been made in an ordinary stack in the open in the bogland.
WATERFORD COUNTY.									
W. Thomas Smith, Esq., for H. Valere (Esq.), Esq., D.L., Clontarf, Clontarf.	1	-	About 40 feet by 40 feet, 40 feet deep.	Rock on three sides, stone and clay on fourth.	Rock.	Corrugated iron.	Not drained.	Inside of hill, stone put in front above.	No. This is once raised, it is weighed with stones, and was made in early spring the growth of September.
B. Jones, Esq., Land Agent for Sir J. J. Morgan, Esq., D.L., Clontarf.	-	2	-	-	-	-	-	-	In stack, No. 1, 12 feet by 12 feet; 12 feet deep. No. 2, 12 feet by 12 feet; 12 feet deep. Were raised down by present.

PROVINCE OF

[illegible]

PROVINCE OF

ANTHROP COUNTY.									
Mr. Charles E. Henderson, for the St. Vincent O'Neil, Charles O'Neil, Assessor.	-	3	No. 1, 18 feet by 12 feet; 22 feet deep. No. 2, 18 feet by 20 feet; 12 feet deep.	No walls.	Concrete.	Slab.	Not drained.	All above surface.	No. 1, 18 ft. at sub-surface. Good carried from first surface, etc., under an open well with star roof supported on four poles. No. 2, excavated from first only, several cubic and made into 2 square, 12 feet by 12 feet, 12 feet high.
William Turner, Esq., T. Pennington, City-Inspector.	1	-	24 feet by 12 feet; 12 feet deep.	Stone and lime.	Concrete.	Of wood.	Drained.	Partly below, built on side of hill.	No.
Edmund McNeill, Esq., J. C. Gough, City-Inspector.	2	-	14 feet by 12 feet; 21 feet deep. 26 feet by 12 feet; 12 feet deep. 26 feet by 12 feet; 12 feet deep.	Well with stones, and 2 1/2 ft. in diameter, 16 ft. deep with Portland cement.	Tile.	Wooden roof.	Not drained.	Above surface.	Here made within a mile.
Major J. J. Brown, J. P. Mount Davis, City-Inspector.	-	1	-	-	-	-	-	Above surface.	Shall be test by 10 feet, 12 feet deep on surface. Do not appear.
R. J. Montgomery, Esq., J. L. Marshall, City-Inspector.	1	-	12 feet by 10 feet; 12 feet deep.	Stone and lime, plastered with cement inside.	Plaster.	Slabs.	Not.	Above.	-
Alon. McNeill, Esq., J. P. Gough, City-Inspector.	1	-	20 feet by 2 feet; 12 feet deep.	-	-	-	-	-	No.
Robert Myers, Esq., J. C. Gough, City-Inspector.	1	-	12 feet by 12 feet; 12 feet deep.	Stone and lime.	Concrete.	Slabs.	Not.	Above.	No.

MUNSTER—continued.

Number of days occupied in filling the ensilage stack.	Materials put in silo or stack.	Temperatures.		Quantity of ensilage in lbs. given to cattle per day.	To what description of cattle (if known) sold on, and how much.	Remarks.
		Onset of Heat.	Average Heat for last 10 days.			
—	Old meadow grass.	Do not know.	—	About 16 lbs.	Store cattle and dairy cows.	Ensilage is stored in sweet ensilage—very sweet, as last year. I never accept for reason of this as it was treated the same. Cattle eat it well, but I prefer the same ensilage to the sweet.
Eight.	Old meadow, rough grass, and broken.	118 degrees.	About 118 or 120 degrees.	7 or 8 lbs.	Shorthorns, small cattle, horses, pigs, cows, 4 or 4 lbs. per day.	Stack first cut, December, 1885. Colour, very brown; very little sweet and then a very small. Waste, about one foot at top of stack and on each side. All stock eat it greedily and thrive on it.
Four & four days left to make up 8 days, done another 4 days, then quantity of 8 days, and then completed.	Thistles and the cutting of the old grass on the fields.	120 degrees.	120 degrees.	1 lb. per day.	To store cattle, horses, and small cattle, and mixed with broken turnips and crushed oats.	I read of this being done in newspapers, and on 29th September I commenced to take in the thistles which were very thick on the fields. The stock was moved, 20 feet in diameter. We took it up gradually, working at it three days, then after three days we worked another three, then let it settle again, then worked one day. Its height in even was then 30 feet; it made down to 1 foot 6 inches on sides, because the 18 inches of earth was too great a weight.

ULSTER.

Cattle in intervals.	K a d e w grass.	120 degrees.	120 degrees.	16 lbs.	Dairy cows, calves, Highland cattle, and fat cattle.	All the grass was cut at intervals in No. 1 stack, being carefully spread all over the surface and thoroughly trampled. No. 2 stacked out on the same principle, but the grass was all cut at once, some being the second cutting from the lawn, during the month of October. Ensilage much better than No. 1. Both were weighed by stones placed upon scales.
8 days.	Green of lawn grass and trees.	120 degrees.	120 degrees.	20 to 40 lbs.	Alternate dairy stock; some to horses.	Ensilage apparently not so good as in former years; perhaps grass put in too dry, a good deal of white rot.
No. 2 second crop.	Typically meadow grass.	Kept as regular.	—	No feed quantity.	To horses and cattle, young and old.	—
11 days.	Meadow and ploughing grass and lying over.	Not used.	—	From 20 to 40 lbs.	Dairy cattle and some cattle.	Quality, sweet ensilage. Young cattle fed on this stuff, with a little oat straw once a day, up to better condition than when fed on hay. Dairy cattle fed on it, ensilage and a little hay up to better condition and milk better than when fed on turnips or mangolds and hay, and so was in milk.
About 10 days in intervals.	Meadow grass.	Not taken.	—	From 20 to 40 lbs. in addition to turnips.	Store cattle of various ages.	The grass was put in at intervals and trampled by men as it was put in. It was covered with hay and straw and chaff. There was some white at top and a little at the sides, but more on sides. That put in slightly was some out of best quality.
12 days.	Meadow grass.	120 degrees.	—	—	Kilch cows and small feed dairy.	The silo not more than half filled with grass, and for want of sufficient pressure there was considerable waste from sides, and rotting round the walls.
14 days.	Grass.	Not known.	—	About 20 lbs. to stock.	To cows; some to horses.	—

PROVINCE OF _____

Name and Residence.	No. of Silos.	No. of Stacks.	Dimensions of Silos, Length, Breadth, Depth.	Materials of Silos.			Whether Drained or not.	Stacks, "Below," "Above," or "Between."	Has Forage been made within the silo, and how?
				Walls.	Floor.	Roof.			
ANTWERP COUNTY —continued.									
William Henderson, Esq., Cornland, Cornsiding.	1	—	16 feet by 8 feet 6 inches; 12 feet deep.	Stone and lime concrete.	Concrete.	Shaded.	Not.	Above.	No.
Mr. James Robinson, Lord Garroway, The Glen, Glasgow, Edinburgh.	1	1	16 feet by 8 feet; 8 feet deep.	Stone and brick lined with cement.	Concrete.	Shaded.	Drained.	About surface.	Yes; have made a stack, 16 feet long by 16 feet wide, and about 8 feet high, which was filled, weighted with straw, and lapped with hay, in April last.
John Campbell, Esq., Dalrymple, Whiteabbey.	2	1	Each 16 feet by 8 feet; 12 feet deep.	Brick, finished with Portland cement.	Portland cement concrete.	Wood covered with felt, a drainage like a greenhouse roof, up as to 12 ft to the top.	Not. The sides of the silos are for a gravel which we could do the drainage are made waterproof which we began to fill also.	All above surface.	My stack made in the latter end of May and that of last year is now in doing equally well.
Robert H. Ireland, Esq., Strathclyde, Belfast.	—	2	—	—	—	—	—	—	The surface being levelled, a drain drain was made a each corner and building constructed, one being taken to keep side perpendicular and well drained. Farmers' rollers passed on each stack.
Henry John McEwen, Esq., Glenside, Belfast.	—	1	22 feet by 12 feet.	None.	Clay.	See "Remarks."	Drain, and covered on all sides.	Above.	On each side of stack, 22 feet by 12 feet.
T. R. W. Hamilton, Esq., Oranmore, Ashkesh, Lough.	2	1	16 feet by 8 feet, 8 feet deep. 16 feet by 10 feet; 8 feet deep.	Concrete.	Concrete.	Do.	Do.	Above.	Stack, above ground, was filled with straw, and straw stack built at top.
Henry I. McQuinn, Esq., 25, St. John's, Donnybrook.	—	1	—	—	—	—	—	—	In a stack, 16 feet by 16 feet, was made by six men, and weighted by straw and straw at all levels, compressed probably to 4 tons weight, in April.
G. H. Caldwell, Esq., Unsworth, Donnybrook.	—	2	—	—	—	—	—	—	In stack, 16 feet by 16 feet, 10 feet deep, with Johnson's straw.
Mr. James Lewis, Lord Garroway, The Glen, Glasgow, Edinburgh.	—	2	—	—	—	—	—	—	Yes. I have made a stack, 20 feet long, 20 feet wide, and 12 feet high, when set.

Name and Residence	No. of Stacks	No. of Stacks	Dimensions of stack - Length, Breadth, Height	Materials of Mass			Whether Drained or not	Situation - "Below" - "Fairly" - "Above" Surface	How Drained from, made without a hole, and how?
				Walls	Floor	Roof			
ANTRIM COUNTY — continued.									
Henry J. Fenn, Esq., Woolhouse, Bally- morey	—	1	—	—	—	—	—		With a side (to a stack 34 feet by 7 feet by 4 feet).
ARMAGH COUNTY.									
Mr. Thomas Wilson, for F. A. O'Connell, Esq., Droghda	1	—	10 feet 6 inches by 14 feet; 4 feet 4 inches deep.	Stone walls.	Thick.	Slates.	Surface drain.	Above surface.	—
CARLISLE COUNTY.									
H. T. Dalrymple, Esq., Virginia	1	—	30 feet by 30 feet; 20 feet deep.	Stone, brick, and cemented.	Thick.	Roofed.	Not.	Side of a hill, 20 ft. above and below.	I have got a side, as described, for the past six years. The present is the best I ever had; it is composed of short meadow grass and abundant mud, about 10 ft. and 12 ft. the afternoon the produce of Galloway's Mine.
DOUGLAS COUNTY.									
G. J. Thompson, Esq., D. A. Dundee	—	1	—	—	—	—	—	Above.	In a stack 20 feet by 18 feet, 10 feet deep. Made from small stones, in an hour, perched. During August and September.
James Hamilton, Esq., D. A. Dundee	1	3	10 feet by 4 feet, 4 feet deep.	Stone.	Rock.	Enough bedding.	No.	In an old oven, 4 feet deep.	Two stacks, 10 feet wide; one about 10 feet, the other 20 feet, in the open, as the ground, dry ground; they were good to the stack.
W. Macdonald, Esq., D. A., New Hill, Dundee	—	3	—	—	—	—	—	—	In three stacks (20) 10 feet by 10 feet, 10 feet deep, 10 ft 12 feet by 10 feet, 4 feet deep, 10 ft 12 feet by 10 feet, 4 feet deep. This was all made with out side. The two larger stacks were built with one side leaning against the side of a hill, and down the the pressure to maintain in bedding. The third was in an oven.

MILSTER—continued

Number of days occupied in filling and making stock.	Materials put in day or flock.	Temperature.		Quantity of feed given to the cattle per day.	To what description of cattle, if so known, was it, and how much.	Remarks.
		Ground level.	Above or below for first 24 days.			
Each day's during job in at night.	Afternoon of mowing off which hay was made on the 20th July. Cutting for silage commenced on December.	Constantly.	Not taken.	About 15 lbs. per day to each.	Milk cows.	The stock was built in the open, against an old wall which formed two sides of it. In two weeks of 7 five o'clock hours of about 12 hours sleep was given, mostly slacked out, cramped down and so forth. In this manner the first day's filling was raised on the first day to about 1000 lbs. It was then weighed by means placed on all doors and gates to about 20 cwt. in the square yard. On the second day the second length was suddenly built up to the same height, and similarly weighted. On the following morning the first length was down to about 4 feet and the weight was then taken off it to about 100 lbs. being further raised. For some time this weight was thrown temporarily on the second length, and the building of the first length was completed with the third day's mowing, and the original weight replaced on it. The fourth day finished the stock, and the weighing being placed on it, it was removed to the outside to stand. In this manner I have got the 200 tons from silage, at ending cost, at about 100 lbs. per cwt. good quality, free from diarrhoeal feed, or at least containing no food from grass that would otherwise have been of little value to me.
From August till to September.	About 100 cartloads of plantain grass.	100 degrees, Fair.	About 100 degrees, Fair.	About 7 lbs.	To one and two year old stock.	We commenced filling on the 1st August with plantain grass, and continued filling at intervals up to September 1st. At the process of filling weeds in the grass was well mixed and mixed with an old hay, and in good condition. It was raised about 1000 lbs. per cwt., and was weighed with the same and old mixed (about 1000 lbs.).
For 10 or 12 months in filling.	Cattle's (from 1000) silage. It was very good.	Never tried. I put it in a cask and it is much the best way of preserving.	—	Never weighed it; give as much as they eat.	Milk cows and young cattle, very nearly to put of the house.	My opinion is that the silo is much to be preferred to the stock. If you cannot make a very large stock at all have any, the best is to grow on a small scale, and in good condition. It is raised about 1000 lbs. per cwt., and is weighed with the same and old mixed (about 1000 lbs.).
Twenty.	Grass from 1000 cartloads and waste from.	—	—	10 lbs. about.	Young cattle and dry stock.	I had about nine inches waste on sides. Made by weight brought on by being taken.
Did not keep any records.	—	—	—	—	Milk, young stock and calves.	I made this, rolling with a barrel filled with water. I had the short, sweet grass for the best, much better than long grass. I put in a lot of hay, which did really well and were good, grass. I put it in from time to time. The stock was raised about 1000 lbs. per cwt., and was weighed with the same and old mixed (about 1000 lbs.).
About three weeks.	Grass, partly from 1000 cartloads and waste from.	No record.	—	Not weighed.	Dairy cows and calves.	We tried a machine silo with wooden roof for two years, but had such a narrow bed, and we weight with silage about 1000 lbs. per cwt., and was weighed with the same and old mixed (about 1000 lbs.).

ULSTER—continued.

Number of days required in making silage or ensilage.	Materials put in the silo or stack.	Temperature.		Quantity of ensilage in the silo, given to cattle per acre.	To what description of cattle, of so many acres so, and how much.	Remarks.
		Greatest heat.	Average heat for first 14 days.			
1 day.	Coarse grass.	Almost boiling heat.		About 100 lbs. per acre.	Two year-old stock, none to the acre.	My opinion as to ensilage is that it is extremely useful and beneficial for young cattle, which showed a great preference for it, inasmuch as they would not touch the regularly made hay so long as the other was available.
About 14 days making.	Round stack, second crop grass and clover; lower stack, burnt grass, wheaten, and green oats.	at up to 10 degrees.		About 8 to 10 lbs. with straw.	Stone cattle from 1 year-old to 12 months did not eat of it, although often tried.	—
3 days.	Grass grown in dampness or plantations.	Not taken.		Irregularly, not weighed.	Cows and stone cattle.	A partition of wood is in the above measurement, which makes it more easily worked, as strong boards and staves are used for pressing and can be changed from one side to the other when it is being filled. It can be filled in one day, and when the grass is put on for four or five days it can be filled again, and about three times filled and pressed each time till it is together.
5 days.	Second cutting of meadow grass.	—	—	—	Cattle and cows.	The silage turned out very good and with as low white turn, contrasting very favourably in this respect with the stack silage I have previously tried, in which there were large loss.
About 6 days, with addition of a week.	—	—	—	Two-year-olds, about 10 lbs. of straw, about 10 lbs.	—	This second try ensilage stack was not so good as the first. There was a considerable amount of waste, owing to the fact that in feeding the stack was allowed to get white as it was in process of being made, consequently all cattle & sheep refused to eat from here to top because bad. Others were good as before.
10 days.	Meadow grass.	120 degrees.	120 degrees.	50 lbs.	Milk cows and young stock; none to the acre.	The stack was started on 21st July, 1880, when it was built to 2 feet high, more grass on 18th to 20th. From 21st on, more grass to 4 feet. Heat from 80 to 120 degrees. Graded on November 1st. Silage about 12 ft. from top in colour, inside very hard if it will leave water food for it.
Three.	About 10 tons of straw and clover.	Temperature not taken.	Not taken.	Not taken.	To stone cattle and milk cows, but not to horses.	The ensilage was made in stack with apparatus supplied by Agricultural Dairy Co., consisting of a pressed wire rope, winches, and levers for pressing the grass together. The ensilage is made very good and good.
—	—	—	—	—	—	All the seasons in former years. No change. Ensilage very good, and more satisfactory.
14 days filling.	Rough grass.	No proper means of testing heat.		Here not begun to feed on this or 1880 made silage at present.	Dairy cows.	—

Name and Residence	No. of Pines	No. of Stakes	Dimensions of Stakes—Length, Breadth, Depth.	Materials of Sides			Whether Drained or not	Structure: "Below" or "Above" Surface.	Has Foundation been made with stones and how?
				Walls	Floor	Roof			
DOWNS COUNTY— <i>continued.</i>									
H. O. Richards, Esq., Maitland, Waverley- grove.	1	—	18 feet 6 inches by 9 feet 4 inches; 14 feet deep.	Random rubble brick against side of struc- ture. Fin- ished with ce- ment, finished very smooth with special treatment. Op- erations regu- larly and plan- ning, match re- sults on with the walls.	Cement finish- ed smooth.	Wooden shat- tered to fit of structure.	Not drained.	Three feet the below sur- face, con- crete floor in gravelly soil, with concrete on floor level for watering water. Filled with post- top of back.	No.
FERNHAGG COUNTY.									
Ed. Hon. the Earl of Selkirk, B.L., Quail- creek, Kamsaskia.	9	—	10 feet by 12 feet; 12 feet deep; 14 feet by 16 feet; 10 feet deep.	Stone.	Earth and gravel.	Stone.	No.	Above the sur- face, being laid in the face of the concrete to lean purpose.	No.
E. M. Archibald, Esq., J.P., Crookston, Edmonton, Can.	—	1	—	—	—	—	—	—	Yes. A slope sink 10 feet by 14 feet 12 feet deep was made by tunnel under ground of some stone at back on 11 feet and sink in so deep, possibly and thick in, it not yet opened.
Ed. Hon. the Earl of Selkirk, B.L., Quail- creek, Kamsaskia.	9	—	No. 1—10 feet by 12 feet; 12 feet deep.	Stone and lime.	Concrete.	Felt.	Drained.	Above surface road on one side; four feet under level of side- wall.	One stack is in crossed with stone about one foot of width. Center very good and circle of it satisfactory.
			No. 2—14 feet by 20 feet; 14 feet deep.	Do.	Clay.	Stone.	Not drained.	Above surface.	
A. M. Haggard, Esq., Sawyer's, Kamsaskia.	—	1	—	—	—	—	—	—	Stacked in wooden in first basement when constructed; two high, with wide clay floor.
J. Arthur Irvine, Esq., J.P., Dorrington, Kamsaskia.	—	3	—	—	—	—	—	—	Yes, in two stacks, 8 feet by 12 feet; two high; and 16 feet by 14 feet; 16 feet high, with one of stone, concrete relief.
LONDONBERRY COUNTY.									
W. Dunlop, Esq., J.P., Newpark, Columbia.	—	1	—	—	—	—	—	—	Yes; built in square stack, 14 feet by 14 feet, and 14 feet high; walls and also top finished with lime & mortar. Under side placed the corner edge of top finished on corner, with with 18 or 12 inch stone, with 12 feet high, then layers 14 ft. with stone & mortar.

Name and Residence.	No. of Sites.	No. of Stacks.	Dimensions of Pile—Length, Breadth, Depth.	Materials of Sides.			Whether Drained or not.	Structure—“Belted” or “Party” or “Alone” or “Stations.”	Has Weather been made to prove a pile, and how?
				Walls.	Floor.	Roof.			
LONDONDERRY COUNTY—continued.									
Robert Dunn, Esq., Malinbeg.	1	1	27 feet by 12 feet; 12 feet deep.	Stone, plastered inside with cement.	Concrete.	Slates.	Yes, masonry work.	Above surface.	In a stack, 12 feet long, 12 feet wide, 12 feet high; a shed, 12 feet wide, 12 feet high.
Sir Fred. W. Keppel, Bart., D.L., Malinbeg, Londonderry.	1	1	17 feet 6 inches by 12 feet; 8 feet deep.	Stone and lime.	Plaster.	Slates.	No.	Above surface.	In a stack, 12 feet long by 12 feet wide. As each layer was put on, it was well, and also with green straw, which was washed, weighed it with about 100 lbs. of straw to 100 lbs. of stone.
Michael King, Esq., Newcastle, Londonderry.	1	1	18 feet by 12 feet; 8 feet deep.	Brick.	Earth.	Stone and slates.	No.	Recessed on three sides with walls. The site is built in a hollow cut out of the side of a hill. The site being level with the surface of the hill, necessitates for digging, and the bottom level with the surface of the hill below, necessitates for increasing the drainage.	No, not this year.
W. H. Lane, Esq., Malinbeg.	1	1	24 feet by 12 feet; 10 feet deep.	Brick and lime.	Concrete.	No roof, tiled from top and then finished with stone.	Yes.	Partly above, partly below surface.	I have a small dry stack, green grass, built in stone, and covered with straw and stone.
J. E. White, Esq., St. John Park, Londonderry.	1	1	—	—	—	—	—	—	I have a small dry stack, covered in the last four years, building the one and widening it when finished.
D. W. Campbell, Esq., Dungannon.	1	1	30 yards by 4 yards; 8 feet deep.	Between two clay drains, just as good as a site.	Clay and G.C.	Stone covered with clay.	Drained.	Below two 12 in. x 6 in. when first laid down, and work.	Yes, I made one end to another; I do not cover it with straw or anything of the kind.
R. J. O'Farrell, Esq., D.L., Faldut, Dungannon.	1	1	—	—	—	—	No.	Above surface.	In two stacks, No. 1 12 feet by 12 feet, 12 feet high. No. 2 12 feet by 12 feet, 12 feet high. The stacks are well finished and well finished with straw.
Dr. Col. W. R. R. Brown, Esq., Bellefleur, Dungannon.	1	1	—	—	—	—	—	—	In two stacks, No. 1 12 feet by 12 feet, 12 feet high. No. 2 12 feet by 12 feet, 12 feet high. The stacks are well finished and well finished with straw.

ELSTER—continued.

Number of days occupied in silage or ensilage.	Material put in silo or bunk.	Temperature.		Quantity of ensilage or silage given to cattle per day.	To what description of cattle, if to horses, cows, and how much.	Remarks.
		Greatest.	Average.			
At least 10 to 12 weeks.	Sound, cut clover and eye grass.	Temperature	not taken.	Not weighed, but two feeders a day; what cattle would eat without waste.	Primarily to stock, not fed to horses.	I am still of opinion that silage of any kind is by far the best way of turning into a most suitable food. I use Fairbank's silage when filling silos or bunks, about a fortnight after filling silos, weight 80 lbs. to square foot.
At least 8 days with plenty of two first-year stock daily.	Hay filled with grass cut in plantations, clover, &c., fresh stacks of second cuttings of clover and meadow grass.	My record of kept.	Temperature.	At least 10.	Milk cows and young cattle.	Cattle eat the ensilage freely. To the young stock it is now given in the hay. My experience of ensilage extends over seven years, and I intend to go on making it.
14 days.	Aftergrass, second cutting, also hay.	84° Fahr.	From 100° to 140°, first 10 days about 8 feet deep, when temperature rose to 140°, rising again to the depth of 4 feet, when temperature rose to 140°, rising again to the depth of 4 feet, when temperature rose to 140°, rising again to the depth of 4 feet, when temperature rose to 140°.	84 lbs.	Stores, no horses.	The brick walls forming the sides of the silo are bevelled to the height of seven feet and perpendicular within four feet high, based on them making the silo height eleven feet from the upper base foot being for the purpose of preventing the grass from spreading when weight applied. I have this year purchased no waste, all the ensilage being sound and good.
Six to eight weeks, daily.	Aftergrass.	I did not take the temperature.	I did not take the temperature.	I have not yet called on my silage, but will give about 10 lbs. a tank.	Intend to use it entirely for store stock. I am working in the room are finished.	Not having opened my own silo I can't speak of them, but several authorities built I have seen opened are very good, and the stored stock has been in former years. I still approve of it as a good food.
Any time convenient.	Grass, clover, eye, and vetch, &c.	Not observed.	Not observed.	From 10 to 15 lbs. according to size of cattle.	Cattle, sheep, horses, and pigs.	I made about 800 tons of ensilage this year. I have used it four years, and would not be without it on a farm. It is easily made first-class fodder, and if required can be kept over from one season to another without deterioration.
About 10 days.	Best of good meadow grass.	About 110°.	—	I gave 10 short cattle 12 a house about 10 weeks as they could not feed more than 10 lbs. per day, and 4 lbs. of broken oats. Cost price of cattle in November, 64 sh. per head, and sold them in May for £10 per head, being fat as stored stock.	—	I put in eight feet of grass first day, put about one foot deep of stores on, then every third day removed stores and added about five feet more of grass well finished. The ensilage was not good and sweet, about one-fourth of pit lay over water this year; it seemed to improve by lying over, and the cattle were much fonder of it. The last year—now it is better than the stored one, five feet wide and eight feet high, and the grass, but owing to store cattle below so after this evening I thought well, and believing the ensilage will improve by keeping some on last year, I did not open this silo. I did once it is good.
Three days making the hay stack, 14 lbs. silage.	Longer stack grass, the other clover.	—	—	84 lbs.	Young cattle and sheep.	—
—	2. Meadow grass 2. Second crop clover and grass.	Not taken.	Not taken.	Not weighed.	Milk cows and young cattle of all ages.	All cattle thrive well upon it, and eat it greedily.

[illegible]

ULSTER—continued.

Number of days elapsed in making the ensilage.	Material put in the silo.	Temperature.		Quantity of ensilage in the silo in cwt. per acre.	To what description of cattle it is given and how much.	Remarks.
		Greatest Heat.	Average Heat for five to ten days.			
About 8 or 10 days at 20-30°.	Grass.	Not taken.		Varies. Some cows say a good deal; others say it is about a few days.	Dairy cows, young stock, refuse to eat.	Ensilage stacks, if properly made, answer well, and are far less expensive than silage. If stacked with hay or straw it makes capital food for young stock.
Filled for 6 days till the top, then weighed down. After a fortnight a second layer was added.	OM meadow grass.	Not observed.		—	Fed to sheep and swine.	This year an error was made by putting too large a quantity of grass per day—the layers should well spread and rolled, being about a foot deep, instead of 18 inches to 2 feet as usual. When the first filling was put in and rolled, some were put on, giving a pressure of about half a hundred weight to the top. After a fortnight the silage was removed and the silo filled and heavily weighted with more than 100 cwt. to the foot. The lower half of the silage has rotted, layers where heavy materials were used.
1 or 2 days.	Ordinary grass and alfalfa.	—	—	20 lbs.	Milk cows.	I think Ferguson's roller a good tool, but it would be heavier and more effective if the diameter of the rollers was the same as that of No. 1, and the length less, it would also be lighter and simpler. When grass is at all old I like to add weight in addition.
Grass and clover.	Grass.	Grass.	say.	Milk cows get about 20 lbs. of silage and give a reasonable amount.	All classes of cattle; to the other stock.	I find the waste around my stacks considerable; further experiments may enable me to reduce waste at night, but at present I have about six to twelve inches of silage waste on the outside of cylindrical stacks. At present I am not able to remove the quality as well as silage as in my book silo.
1 day.	Upland meadow.	120 degrees.	110 degrees.	34 to 40 lbs.	Dairy cows.	My ensilage was very good; the cows would take it in preference to any hay, and did well on it and bar without any roots. I applied much pressure to the stack; in four days the stack was down to nine feet; then built a hayrack on top of it and did not get any lower than nine feet.
—	Enough meadow grass.	—	—	—	Swine.	The system of applying pressure by wire ropes seems to produce a better result than my neighbours' silage in their silos, but for either weight or rolling.
From time to time on wet days.	Grass chiefly from plantation.	Not taken.		About 2 stone per head.	Household cattle.	Ferguson's roller used. The silage was sweet and of excellent quality; it is eaten greedily by all my stock. When I began to use it I had much to about 3 feet 6 inches in height.
1 or 2 months.	Meadow grass.	No record.		—	Young stock and cows.	Cattle appear to eat and thrive on this ensilage fairly well. I think the worst sort of food in here; it gives enjoyment to the labourer on stormy days in summer, besides giving a change of food to the cattle at winter.
11 days.	Meadow grass.	180 degrees.	270 degrees.	400 lbs. in dairy cattle with no much of food and brass; as the silage is fed to the cattle, it is chopped hay and turned; it is the best young cattle.	None to horses, but whenever they would pick a bit.	I will build face of bank out for next season, and bring it to edge of road, of which I will have 12 feet of fall as it was good before. I had on men to tramp, but three who were engaged shaking grass and building. Some of the grass was cut three days before. The weather was very wet. The silage was very good and the cattle eat it in preference to any other food.
About 10 days.	OM meadow and plantation grass. Put in when grass was wet, but they did not roll it.	—	About 100 degrees.	Could not tell.	Milk cows and all kinds of cattle in house and on grass.	The ensilage I used this year was made the year before in summer, 1884. I opened the silo, which is now 10 feet high, and found it in lowest end, and to find only took one out or 2 feet of the silage, and left the remaining in left covered with 4-inch by 12-inch boards 2 inches of straw, and a quantity of brush and some in January, 1885, when people came the distance to see what they expected would be my answer. They were disappointed, as I had not one particle of it rotten. My experience is that if ensilage is made in a house such as mine, and the silage properly tramped, and the bottom of the silo given to Mr. George Fry's book on ensilage followed, there will be no waste whatever. The end of my silo comes to the level of road-way; the ground level being away towards grass and a door to take the silage out by, while at a lower level I put a hatch, with a flat roof, over which the streamer of the silo runs.
About 10 days.	Grass of all sorts, including plantation, meadow, cut, and some from the road.	Not taken.		About 20 lbs.	Milk cows and young stock.	—

PROVINCE OF

Name and Residence.	No. of sites.	No. of stacks.	Dimensions of Site—Length, breadth, depth.	Materials of Site.			Weather directed at site.	Position, above or partly below, or above surface.	How Storage was made (weight, etc., and cost).
				Walls.	Floor.	Roof.			
DUBLIN COUNTY.									
Edward W. Fowler, Esq., Land Agent for the Right Hon. the Earl of Clarendon, Quarterly, Ballinacorney.	-	1	About 40 feet by 20 feet; finished, 3 feet deep.	3 stone walls, and 3 temporary plank from 20.	Reston clay.	Planks and boards fixed with sand.	No.	Above surface.	Made by a cover against two walls.
Rev. L. G. Dillon, Clonsilla, Abbotstown.	1	1	27 feet by 14 feet; 14 feet deep.	Stone.	Concrete, Portland cement.	Corrugated iron sheets.	Not finished.	Above.	Yes, in a stack 14 feet by 14 feet, built up to 18 feet high, bottomed down to 1 foot. Topped with about 1 foot of straw, and covered with iron sheets held up by chains. No further weighting used.
R. O. Armstrong, Esq., 27, Conyngham, Abbotstown.	-	1	-	-	-	-	-	-	In a circular stack 20 feet in diameter, 10 feet high. The grass was cut as far as it could, and on the ground, as the stack rose to height a quantity of straw was used. The horses and cows went up, deposited the load, and came down again till it was 18 feet high. The stack was covered with 2 feet of straw.
John Gahagan, Esq., 47, Gilling, Killybeg.	1	-	40 feet by 18 feet; 12 feet deep.	Stone covered with cement.	Cement.	Shed.	No.	Six feet below surface and above.	None this year, and had I not made it also would not have made one, considering that the state in making it is an open stack it not sufficiently green to pay for the cost of a site.
Michael Barry, Esq., D.E., Killybeg, Clonsilla, Abbotstown.	1	-	38 feet by 28 feet; 11 feet deep; 22 feet by 12 feet; 11 feet deep; 24 feet by 12 feet; 11 feet deep; 20 feet by 11 feet; 10 feet deep; 20 feet by 14 feet; 8 inches; 11 feet deep; 20 feet by 12 feet; 8 inches; 12 feet deep; 14 feet by 8 feet; 8 inches; 12 feet; 8 inches deep; 16 feet 6 inches by 7 feet 8 inches; 12 feet deep; 20 feet by 11 feet; 10 inches; 10 feet deep; 20 feet by 20 feet; 12 feet deep.	Stone and mortar.	Concrete and cement.	Galvanized iron.	Finished.	Above surface.	No.
* * *	1	-	-	-	-	-	-	-	-

CONNAUGHT.

Number of tens occupied in filling the ensilage stack.	Materials put in, 1850 or 1855.	Temperature.		Quantity of Ensilage in the given 50 Cattle per item.	To what description of Cattle; if to be used, state so, and how much.	Remarks.
		Grassland Soil.	Arable Soil for 1st 12 Days.			
Made at different times of several days.	Grass.	Kept no record.	As much as they would eat.	Cattle in house only in winter in field.	The above stack was raised four times at intervals, according as the weather suited, and weighed with plank and scale, about 120 lbs. to the square foot. At the beginning the grass was cut as top of the stack. We had about 120 even-sown of this sowing from the 1st of July, and so laid for cattle and which cows I later took with the same. It is the most economical food we ever had. We have been very successful with good grass ensilage, but the wild comes in the field which grass did not do well, it was too full of soft weeds, with beetle stems and occasional weeds, and rotting and spoiled all it came in contact with, and had to be thrown out. It contained a vast deal of water. With which cows, if not before making one ensilage the milk and butter got a very sharp and taste, but we corrected that and gave no damage until after milking. It keeps up the condition of the cow, throughout the winter, and gives a better quantity and quality of milk. In fact, our cow the 1st and about 12 cows, better than any, are largely fed upon it now.	
Eight days for stock, 18 for sale.	Old meadow grass in both.	—	—	40 lbs. to finish cows.	40 lbs. to out- going cattle. More grass 40 bushels.	Ensilage in the field also has been used here for six years, and is used as well as other cattle, and the last part of it is eaten freely by sheep.
About 12 days.	Grass.	—	Did not test.	—	Three year old cattle, 20 bushels. Two sheep also too.	We feed 120 bushels with hay, 120 with straw, 120 with hay in winter, 120 with straw. These were in best condition in May. The grass was simply made into a circular stack called up. The purpose of the cattle and the cow weight made the best thing I ever saw, and I have seen a great deal. It turned out wonderful food. I also have made several with Herts Faint Farm, Leiston, but the circular stack as above is the best.
About 12 days.	Old meadow grass.	—	Did not test.	Depends on whether they are being fed or kept as stock.	Never give it to horses though they are fond of it.	I made no ensilage in stacks last summer as the weather was so favourable for picking hay. With good weather I think hay can be made fully as cheaply as ensilage, even when ensilage is made in stacks where the grass is green. The ensilage when making it and also when taking it out in winter is a serious expense.
Average, 1 day.	Grass, meadow or 1850 and cows green, 1850 and 1855.	No note taken.	—	About 12 lbs.	1850 cows, 1855 calves, and calves. None to horses.	—
—	Grass, meadow or 1850 and cows green, 1850 and 1855.	—	—	—	—	The ensilage I had was made in a silo house, but unfortunately it turned the grass only in was not ripe, and had not time enough to keep properly, and I was obliged to use it as straw. When first I put it in I intended to heat it, but when we came to cut it, we found it had not heated properly. I had no ensilage the year before from short-grass that turned out very good, but I could not say how much I gave each horse. It was to cows I gave 12; I gave some to horses. I did not take the temperature.

Name and location.	No. of farms.	No. of divisions.	Dimensions of field—Length, breadth, depth.	Materials of fill.			Whether drained or not.	Situation, "Below," "Partly Below," or "Above" surface.	Has drainage been made, and how?
				Walls.	Floors.	Roofs.			
GALWAY COUNTY —continued.									
R. W. Waldman, Eng. O. S. Morris park, Indianapolis.	-	2	-	-	-	-	-	-	In circular stacks, at less diameter, and 7 feet high when set.

Name and Residence.	No. of Stracks.	No. of Stracks.	Dimensions of Strack—Length, Breadth, Depth.	Materials of Strack.			Whether Drained or not.	Situation—“Below,” “Level,” or “Above” Surface.	Has Surface been made within 500, and how?
				Walls.	Floor.	Roof.			
SALWAY COUNTY—continued.									
J. J. Cheever, Esq., J.P., Kilmoy, Ballinacree.	—	1	—	—	—	—	—	—	By forming a square open strack, 10 feet by 10 feet, and the glass piled on so quickly and so evenly carried to, over and beyond a level surface, a heavy stone masonry was built back and forth on pieces.
Mr. Henry Graham Collier, Ballinacree, D.L., Mount Ballinacree.	—	1	—	—	—	—	—	—	Yes, in strack—No. 1, 10 feet by 10 feet, No. 2, 10 feet by 10 feet—very good and brought in a ridge, then covered with straw and laid at north.
Mr. S. Egan, Kilmoy, Collier, Ballinacree.	—	1	—	—	—	—	—	—	In strack, at foot by 10 feet broad.
LEITHAM COUNTY.									
J. O'neill, Javies, Ballinacree, D.L., Ballinacree.	—	4	—	—	—	—	—	—	Yes, in raised strack on the ground, 10 feet by 10 feet, and 10 feet in the water, respectively, and when completed from 10 to 10 feet high, covered on top with sods from a level road, strack, and every 1000 strack is covered with sods, and when finished it formed a raised strack.
James Deane, Esq., D.L., Kilmoy, Ballinacree.	2	—	at foot by 10 feet; 10 feet deep; depth of sods 10 feet.	Stone faced with concrete.	Flags . . .	Slates . . .	Not drained.	Above surface.	No.
St. George H. Johnson, Esq., J.P., Mount Prospect, Kilmoy.	2	1	No. 1, 40 feet by 10 feet; 10 feet deep. No. 2, 40 feet by 10 feet; 10 feet deep.	Walls smooth with Portland cement plaster. Do.	Concrete . . Do.	Corrugated iron. Slates . . .	Drained. Do.	Surf into a 20 ft. level with ground in front. Do.	Yes, No. 1 strack, 10 feet by 10 feet, 10 feet deep, in open, weighted with sods for drainage in the ground, so that the sods can be taken down, not forced up.
MAYO COUNTY.									
Mr. G. J. Egan, Esq., Ballinacree, Ballinacree.	—	1	—	—	—	—	—	—	—
J. F. O'neill, Esq., J.P., Ballinacree, Crossmolina.	—	1	—	—	—	—	—	—	A ridge, 10 feet 6 inches by 10 feet 6 inches; 10 feet deep from sods at present. Fenced with Johnson's wire, 6 ft. of fence.

DONNAUGHT—continued.

Number of days from start to finish.	Materials put in and on stock.	Temperature.		Quantity of Ensilage in Tons, given to Cattle per day.	To what description of Cattle, if to horses, state so, and how much.	Remarks.
		Grassland Heat.	Average Heat for first 30 days.			
14 days from start to finish.	Superior upland meadow grass, 10 years old.	No record high.	I should say over 800 degrees.	About 16 lbs. per head, per day.	Only first year old horses and calves only, none in harness.	Last year I fed it to milch cows; it increased the yield of milk considerably, but the cows themselves ran down in condition. Before it was matured in October, I tried feeding it sparingly with dry hay and straw, but the stock did not like it, and refused to use the hay, and I had to discontinue the silage, and feed them straw and hay.
No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000	No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000	No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475,				

Name and Residence.	No. of Sites.	No. of Stacks.	Dimensions of Sites—Length, Breadth, Depth.	Materials of Site.			Whether Destroyed or not.	Stacking: "Fully Below," or "Above" Surface.	The Endings have made within a Site, and how?
				Walls.	Floors.	Roofs.			
NATO COUNTY—continued.									
R. W. Cross, Esq., Esq., Overseer, Cross- roads.	-	1	-	-	-	-	-	-	Yes: In a stack, it rests by 18 feet, 12 feet deep with the backs over the top, and heavily weighted at the ends.
William T. Johnston, Esq., Esq., Overseer, Cross- roads.	-	1	-	-	-	-	-	-	Yes: In a stack, it rests by 18 feet, 12 feet deep, made under a little bridge, a wheel 18 feet high, the ground below out of the side, so that when nearly full the wind can blow the grain out, leaving the grain could be driven over the grain in the stack. When full, it was weighted with iron and copper laid on the top.
Mr. S. F. Prince, Manager for General Giro, Dr. Midway.	4	4	No. 1—14 feet by 8 feet; 8 feet deep. No. 2— Do. . No. 3— Do. . No. 4— Do. .	Slates and com- mon. Do. . Do. . Do. .	Concrete. . Do. . Do. . Do. .	Iron. . Do. . Do. . Do. .	Yes. . Do. . Do. . Do. .	Partly below. Do. . Do. . Do. .	3 stacks—4 feet by 18 feet—18 feet high, made chiefly with grain.
H. T. P. Prince, Esq., J.P., Foster, Cross- roads.	4	-	40 feet by 20 feet; 20 feet deep. 50 feet by 8 feet; 30 feet deep. 27 feet by 17 feet; 18 feet deep. 30 feet by 10 feet; 15 feet deep.	Plastered. . Do. . Plastered. . Plastered. .	Earth. . Concrete. . Earth. . Concrete. .	Corrugated iron. Do. . Slates. . Corrugated iron.	Yes. . Do. . Do. . Do. .	Above surface. Do. . Do. . Below.	-
ROSCOMMON COUNTY.									
The Right Hon. the O'Donnell, Esq., Esq., Overseer, Cross- roads.	1	1	-	-	-	-	-	-	2 used and improved this year, with a stack made in the field where the grain grows.
Mr. A. F. M. O'Donnell, Esq., J.P., Kilmoran.	-	1	-	-	-	-	-	-	In a stack, with the aid of several small pieces of wire and ladder pieces, and placed by the hand- saw from the corner of the stack. The stack was filled was protected by a covering of straw of about 1000 to a 1000 of straw, and during the winter the stack was covered with straw and a cover, and in wet weather the stack was placed inside.
SLIGO COUNTY.									
Mr. H. W. G. G. G. G., Esq., J.P., Lifford.	1	-	20 feet by 18 feet; 15 feet deep. Do. .	Masonry. . Do. .	Concrete. . Do. .	Iron. . Do. .	Destroyed. Do. .	Partly. . Do. .	Not in use.

CONNAUGHT—continued

Number of days occupied in filling silo or making stack.	Materials put in silo or stack.	Temperature.		Quantity of ensilage in the silo, given in Cwt. per ton.	To what description of cattle, if to horses, sheep, &c., and how much.	Remarks.
		Overcast days.	Average heat for first 10 days.			
10 days.	Straw, old manure.	Not registered.		11 lbs.	Milk cows, stall-fed, and horses, 18 lbs.	This ensilage is ensilage made and consumed in 1890 and 1891. A quantity of old hay remaining on hand on ensilage was made from this ensilage. Manure I consider more valuable for this ensilage.
About 10 days at intervals.	Corn, green and red.	Did not observe.		About 30 lbs. corn, in two lots of 15 lbs. each, sorted and averaged.	High cows, stall-fed, and pigs.	A very valuable system, well suited to the moist and variable climate of this country, making the silage almost independent of weather, and enabling them to secure a vast quantity of ensilage, which would otherwise go to waste, and valuable winter feeding.
From 1 to 10 days.	Corn, rye, and grass.	176 degrees.	180 degrees.	From 16 to 18 lbs. (chaffed), given with chaffed hay and straw with subject (average); this is to cattle housed.	Horses get from 12 to 14 lbs. through their chaff and straw. This is all cut off and used all chaffed.	The stack silage is given to the fields, without hay or anything else, to a year old bullocks, at 12 lbs. per day.
From 1 to 1 week.	Hay, straw, horse manure, and rabbit.	—	—	12 lbs.	To dairy cows, horses, and young calves.	With my twenty years' experience, I have given up stacks in the open, being too wasteful. Silage made in old buildings will be better, with manure otherwise silage will be waste. Nothing but good grass will make good silage. I have rabbit, and cattle and a cow.
About six weeks.	—	—	—	—	—	I made a pit two and a half feet deep, about 9 feet long, and 12 feet wide, and had the grass cut into thin, the corn going up on it and it got up high. When finished, it was allowed to sink, it stood about a foot over the ground, and 4 inches, or 6 inches in all. I then took an ordinary harrow on the top, and finished it in the usual way. I found this covering to answer admirably, there was scarcely any waste between the silage and the hay. The portion of the hay next to the silage and incorporated with the small, being eaten greedily by the cattle. The hay and silage were given to sucking cattle—hay is the morning and silage in the evening.
About 10 days, with intervals between 1 to 10 days.	Grass from old meadows, generally freshly cut.	About 140 lbs. green feed.	No record kept.	About 10 lbs.	Out-fed store cattle, aged between 18 and 2 years.	I have been making ensilage on this system for four years, but only in the moderate extent mentioned, and have found that by the exercise of reasonable care, and constant feeding, worked in, in that way, easily produced. I used but slight pressure but when the final weighing being only about 10 lbs. on the end of each horse, which equals about 27 lbs. on top of each.
10 days.	Old manure and grass.	140 degrees.	150 degrees.	About 12 lbs.	Milk cows and fattening cattle.	We find the milk cows give richer milk when fed on sweet silage than when receiving an equal weight of unsweetened silage or chaffage. The following table shows almost as well on it as when fed on straw.

THE WEATHER.

Abstract of Meteorological Observations registered at the Ordnance Survey Office (Height above the Sea 162.2 Feet) Phoenix Park, Dublin, during the year 1889:—

The barometer stood highest in 1889, on the 5th December, at 9 P.M., the air being calm, when it was 30.718 inches; it was lowest at 9 P.M. on 19th March, when it was 28.949 inches. The highest temperature of the air during the year was 76.2 degrees of Fahrenheit on 22nd June, and the lowest 17.2 degrees on 11th February. The greatest quantity of rain which fell in a day (24 hours) was 1.910 inches on 19th August, with wind S.E. The point from which the wind chiefly prevailed was the W.; it blew from that direction on 128 days, at 9 A.M. The strongest wind was from the W. on the 7th October, and from the S.W. on the 18th December, when the pressure on each day was 3.25 lbs. per square foot.

1889.	BAROMETER.						TEMPERATURE.											
	Corrected for Altitude and reduced to 32° Foh.						Self-Registering Thermometers.						Hygrometers.					
	Mean.			Highest in Month.	Lowest in Month.	Range.	Mean.			Of all Highest.	Of all Lowest.	Temp.	Range.	5 to 9 A.M. Mean.				
	5.0 A.M.	5.0 P.M.	Mean.				Highest in Month.	Lowest in Month.	Range.					Dry Bulb.	Wet Bulb.	Dew Point.	Relative Humidity at Vapor.	Humidity.
January.	29.745	30.180	30.140	29.738	30.184	1.446	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
February.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
March.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
April.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
May.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
June.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
July.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
August.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
September.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
October.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
November.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
December.	29.732	30.180	30.140	29.732	30.180	1.448	55.8	51.8	3.9	52.3	55.5	51.7	3.8	55.9	51.1	51.3	73.6	55.9
Total.	18.730	30.180	30.140	18.730	30.180	1.448	18.730	30.180	1.448	18.730	30.180	1.448	1.448	18.730	30.180	1.448	18.730	30.180
Mean.	29.732	30.180	30.140	29.732	30.180	1.448	29.732	30.180	1.448	29.732	30.180	1.448	1.448	29.732	30.180	1.448	29.732	30.180

1889.	RAIN.			CLOUD.	WIND.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Number of Days when it fell in the Month.	Total Amount for Month.	Observed Amount (Rain-fall in 24 hours).		Direction.	Number of days it blew in certain directions at 5 A.M. and the total pressure in lbs. per square foot.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
						Direction.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
				N.		N.E.	E.	S.E.	S.	S.W.	W.	N.W.	N.	N.E.	E.	S.E.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
January.	29	1 856	480	21	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

METEOROLOGICAL OBSERVATIONS FOR EACH MONTH OF THE YEAR 1889.

By J. W. MOORE, Esq., M.D., F.R.C.S.P., F.R. MET. SOC.

(Extracted from the *Dublin Journal of Medical Science*.)

JANUARY.—As happened also in January, 1888, during the greater part of the month, the weather was open although changeable in Ireland and in Scotland, colder in England, and very cold in France and Germany. The type of distribution of atmospheric pressure was chiefly anticyclonic in the south and south-west, cyclonic in the far north and north-west.

In Dublin the mean temperature (42.4°) was perceptibly above the average (41.3°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 41.0° . In the twenty-four years ending with 1888, January was coldest in 1881 (M. T. = 32.2°) and warmest in 1875 (M. T. = 46.6°). In 1867, the M. T. was 35.7° , and in 1865 it was 37.6° . In 1871 and in 1880, the M. T. was 37.0° ; in the year 1879 (the cold year), it was 35.3° . In 1888, the M. T. was 42.1° . As a general rule, January in Dublin is not colder, but rather a shade warmer, than December. This is owing to the full development in January of a winter area of low pressure over the Atlantic, to the north-westward of the British Isles, and to a resulting prevalence of S.W. winds in their vicinity. January, 1888, proved an exception to this rule, the M. T. being 1.2° below that of December, 1888 (43.5°).

The mean height of the barometer was 30.150 inches, or as much as 0.260 inch above the average value for January—namely, 29.891 inches. The mercury rose to 30.711 inches at 9 a.m. of the 3rd, and fell to 29.200 inches at 8 p.m. of the 9th. The observed range of atmospheric pressure was, therefore, as much as 1.511 inches—that is, a little over one inch and one-half. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 41.9° , or 1.4° below the value for December, 1888; that calculated by Kœnig's formula—viz., $\text{min.} + (\text{max.} - \text{min.} \times .41)$ —Mean Temp.—from the means of the daily maxima and minima was 41.0° , or 0.8° above the average mean temperature for January, calculated in the same way, in the twenty years, 1866–85, inclusive (40.8°).

The arithmetical mean of the maximal and minimal readings was 42.4° , compared with a 23 years' average of 41.3° . On the 18th, the thermometer in the screen rose to 56.2° —wind W.S.W.; on the 3rd, the temperature fell to 27.1° —wind also W.S.W. The minimum on the grass was 22.7° on the same date. The rainfall was 2.215 inches, distributed over 16 days. The average rainfall for January in the twenty-three years, 1865–87, inclusive, was 2.211 inches, and the average number of rainy days was 17.7. The rainfall and the rainy days, therefore, were both slightly below the average. In 1877 the rainfall in January was very large— 4.323 inches on 25 days; in 1869 also 4.258 inches fell—on, however, only 18 days. On the other hand, in 1876, only $.406$ of an inch was measured on but 9 days; and in 1880, the rainfall was only $.563$ of an inch on but 8 days. In January, 1888, 3.244 inches of rain were measured on as many as 26 days, in 1887 (the dry year) 1.615 inches fell on 16 days, and in 1888 1.247 inches fell on 9 days.

A lunar halo was seen on the 14th. The atmosphere was foggy on each of the first six days, as also on the 22nd. High winds were noted on 8 days, reaching the force of a gale on two days—the 11th and 18th. Hail fell on the 9th and 11th, and snow or sleet also on the 11th. Temperature exceeded 50° in the screen on 8 days, compared with 10 days in December, 1888; while it fell to or below 32° in the screen on only 3 nights compared with 5 nights in December. The minima on the grass were 32° , or less, on 16 nights compared with 20 nights in December.

Cold, quiet, foggy weather prevailed during the greater part of the week ended January 5th, 1889, in the centre and east of Ireland, as well as in England. In the west of Ireland and in Scotland S.W. winds and cloudy, mild weather were experienced. From Tuesday, the 1st, to the close of the week a band of high atmospheric pressure extended from North Germany across England and Ireland, while the barometer was low over the Norwegian Sea and Scandinavia in the north and over the Mediterranean in the south. Sharp frosts prevailed within the area of high pressure, but it was very mild on the Atlantic coasts of Ireland, Scotland, and Norway. In Dublin the barometer rose to 30.711 inches at 9 a.m. of Thursday, the 3rd (wind W.S.W.). Thick fogs formed on Friday and Saturday. Fogs were observed on Wednesday and Saturday. Rain fell on Saturday night to the amount of $.021$ inch.

As regards the second week (6th–12th inclusive), except on Thursday, the 10th, which was a fine, dry, bracing day, the weather was either cloudy and damp, or rainy. At the beginning of the week intense frost prevailed in central and eastern England—at 8 a.m. of Sunday, the 6th, the thermometer read 15° at Cambridge, 21° at Loughborough, and 22° in London. This was a dull, damp, foggy day in Dublin. Gradients for southerly winds became pronounced over Western Europe, temperature rose and rain fell very generally. On Wednesday the wind shifted to W. and N.W. in Ireland with a downpour of rain and hail and an abrupt fall of temperature. On Friday afternoon there was a S.E. gale, and immense quantities of rain, hail, and sleet fell in Dublin and its vicinity. Saturday was a dull day, with snow in England. In Dublin the mean height of the barometer was 29.641 inches, pressure varying from 30.002 inches at 9 a.m. of Sunday (wind, W.) to 29.200 inches at 3 p.m. of Wednesday (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 40.2° , or 6.1° above that for the previous week. The mean of the daily highest and lowest temperatures was 40.3° . The absolute maximum in the screen was 50.5° on Tuesday (wind, S.); the absolute minimum was 31.9° on Friday (wind calm). Rain fell on five days (including hail on two days, and sleet on one day) to the large amount of 1.773 inches. Of this quantity, 1.221 inches were measured on Friday and $.455$ inch on Tuesday. There was a fog on Sunday, and a gale was recorded on Friday.

In the third week (13th-18th inclusive) open, but changeable weather was prevalent. Atmospheric pressure was generally lower to the north-westward than to the south-eastward, and in consequence the winds were chiefly southerly to westerly. On Friday morning the force of a gale was reached, but otherwise the winds were not strong. On Wednesday a V-shaped depression crossed Ireland, causing a sudden shift of wind from S. to N.W.; but it soon backed again to S.W. A partial eclipse of the moon was seen in a clear sky on the morning of Thursday, the 17th. Showers fell on the afternoons of Friday and Saturday. Very little frost occurred in the British Isles, and on Friday very high temperatures were recorded in Ireland and Scotland. The weather remained persistently cold in Germany and eastern France. At 8 a.m. of Tuesday the thermometer was 4° at Berlin. The barometer was extremely high over Russia during this week; at Moscow it rose to 31.23 inches on Monday morning. In Dublin the mean atmospheric pressure was 30.124 inches; the extremes were—lowest, 29.720 inches, at 9 a.m. of Wednesday (wind, S.S.E.); highest, 30.401 inches, at 9 a.m. of Saturday (wind, W. by S.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 43.6° . The arithmetical mean of the highest and lowest daily temperatures was 44.8° . On Friday the screened thermometers rose to 56.2° (wind, W.S.W.); on Thursday, they fell to 35.3° (wind, S.W.). Rain fell on four days to the amount of .179 inch—the maximal fall in 24 hours was .080 inch on Tuesday (wind, S.). A lunar halo was seen on Monday evening, the 14th.

Throughout the week ending Saturday, the 26th, an anticyclone, or area of high atmospheric pressure, lay over Ireland and the Atlantic Ocean off the west coast of this country. At the same time, extensive and deep depressions passed eastwards across Scandinavia and Lapland, while areas of relatively low pressure lay also over the Mediterranean Basin. Light or moderate N.W. (N. to W.) winds prevailed in the United Kingdom, accompanied by comparatively mild and dry, but cloudy weather. At 8 a.m. of Friday the barometer varied from 30.57 inches at Valentia Island, in Kerry, to 28.59 inches at Haparanda, on the Gulf of Bothnia—rather steep gradients for N.W. winds consequently prevailed over North-western Europe. In Dublin the mean height of the barometer during the week was no less than 30.519 inches, pressure ranging from 30.347 inches at 9 a.m. of Sunday (wind, W.), to 30.629 inches at 9 a.m. of Tuesday (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 44.0° ; the mean of the highest and lowest daily temperatures was 44.7° . The thermometers in the screen rose to 50.1° on Saturday (wind, W.), having fallen to 35.0° on Tuesday (wind, W.N.W.). Rain fell in measurable quantity on two days—Tuesday and Saturday—the total precipitation being .048 inch, of which .038 inch fell on Saturday evening, as a shallow secondary depression passed over Dublin from N.W. to S.E. Very cloudy skies prevailed during the week, the percentage amount of cloud at 9 a.m. and 9 p.m. being 87. Only on Tuesday was there much bright sunshine. The mildness of the northerly and north-westerly winds which prevailed was due to their origin in an oceanic anticyclone.

The last five days of the month were chiefly mild, changeable, and cloudy, and rain fell frequently although not in large quantity. On Tuesday, the 26th, a remarkable series of V-shaped depressions crossed the United Kingdom, causing a shift of wind from S.W. to N.W., squalls, showers, and a brisk fall of temperature. At the close of the month steep gradients for westerly winds prevailed over North-western Europe, and the weather was generally mild and damp.

At Greystones, Co. Wicklow, the rainfall in January, 1889, was 3.57 inches, distributed over only 8 days. Of this quantity 1.64 inches fell on the 11th, and .96 of an inch on the 5th.

FEBRUARY.—This was an unsettled, windy, wet, and cold month. North-westerly winds predominated, and while the barometer was often high off the W. and S.W. of Ireland, deep atmospheric depressions passed south-eastwards across Scandinavia and the North Sea, producing cold N.W. winds and frequent showers of sleet and hail. On the 10th a severe snowstorm occurred, and the weather was generally inclement.

In Dublin the mean temperature (40.3°) was much below the average (45.0°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 39.6° . In the twenty-four years ending with 1888, February was coldest in 1873 (M. T. = 37.9°) and warmest in 1869 (M. T. = 46.7°). In 1886 the M. T. was 39.7° , in the year 1879 (the cold year), it was 40.1° , and in 1888 it was as low as 38.6° . As a general rule, February in Dublin is only a shade colder than March.

The mean height of the barometer was 29.991 inches, or 0.129 inch above the average value for February—namely, 29.862 inches. The mercury rose to 30.474 inches at 9 p.m. of the 4th, and fell to 29.189 inches at 6 p.m. of the 10th. The observed range of atmospheric pressure was, therefore, 1.285 inches—that is, a little over one inch and a quarter. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 39.6° , or 2.3° below the value for January, 1889; that calculated by Kaemitz's formula from the means of the daily maxima and minima was 39.4° , or 3.1° below the average mean temperature for February, calculated in the same way, in the twenty years, 1865-84, inclusive (42.5°). The arithmetical mean of the maximal and minimal readings was 40.3° , compared with a 23 years' average of 43.0° . On the 1st, the thermometer in the screen rose to 55.0° —wind W.S.W.; on the 11th, the temperature fell to 21.7° —wind W.N.W. The minimum on the grass was 14.9° also on the latter date. The rainfall was 2.440 inches, distributed over no fewer than 20 days. The average rainfall for February in the twenty-three years, 1865-87, inclusive, was 2.183 inches, and the average number of rainy days was 17.3. The rainfall and the rainy days, therefore, were both considerably above the average. In 1888 the rainfall in February was large—3.752 inches on 17 days; in 1879 also 3.706 inches fell on 23 days. On the other hand, in 1873, only .925 of an inch was measured on but 8 days; and in 1887, only .541 inch of rain fell on 11 days. The rainfall in 1887 was much the smallest recorded in February for very many years. Snow or sleet fell on the 2nd, 8th, 9th, 10th, 23th, 26th, 27th, and 28th. Hail fell on the 1st, 4th, 8th, 10th, 24th, 26th, and 27th. The atmosphere was foggy on the 13th, 24th, 27th, and 28th. High winds were noted on 13 days, reaching the force of a gale on five days

—the 1st, 2nd, 3rd, 8th, and 15th. The temperature exceeded 50° in the screen on 8 days, compared with the same number of days in January; while it fell to or below 32° in the screen on only 4 days, compared with only three in January, but with 12 in February, 1888. The minima on the grass were 32° , or less, on 21 nights, compared with 16 nights in January. On 7 days the thermometer did not rise to 40° in the screen.

On Friday, February 1, a fresh westerly gale prevailed, and temperature—which had been very high during the previous night (53° in Dublin)—gave way rapidly with squalls of rain and hail. Saturday, the 2nd, proved the most inclement day as yet felt in the present winter—a fresh westerly gale blowing with frequent falls of snow and bitter cold. The thermometer rose to 35° on the early morning of Friday (wind, W.S.W.), and fell to 29° on Saturday evening (wind, W.). At 8 a.m. of this day the barometer was down to 29.46 inches at Sunbush Head in the Shetlands. Strong N.W. gales, snow and hail, thunder and lightning prevailed in many parts of the Kingdom, and in Dublin 352 of an inch of rain fell in the form of snow.

The weather was very unsettled and changeable during the week ended Saturday, the 9th. Severe, extensive, and deep depressions, travelled southwards across Northwestern Europe, causing rapid changes of temperature, and westerly to northerly gales, with frequent showers of rain or hail and snow. On Sunday a very deep depression was passing down the North Sea, accompanied by severe northerly gales and thunder and lightning in many parts of the United Kingdom. In the rear of the disturbance the barometer rose with great rapidity—nearly an inch and a half at Aberdeen in the 24 hours ending 8 a.m. of Monday. During the next two days areas of low pressure crossed Scandinavia from N.W. to S.E., and the weather was dull, damp, and showery. On Wednesday night a subsidiary depression passed rapidly across the British Islands in the same direction—rain and hail squalls were reported from many stations. During Friday and Saturday another very deep depression travelled southwards down the North Sea, the accompanying gales being of great intensity. In Scotland snow fell heavily, with keen frost, and in Ireland the air became very dry and cold. Sharp frost set in on Saturday. In Dublin the mean height of the barometer was 29.63 inches—pressure varying from 29.471 inches at 9 a.m. of Sunday (wind, W.N.W.) to 29.674 inches at 9 p.m. of Monday (wind, N.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 39.1° , or 6° below the value for the previous week. The arithmetical mean of the highest and lowest daily temperatures was 39.8° . Temperature in the screen rose to 40.5° on Wednesday (wind, W.) and Thursday (wind, W.N.W.), and fell to 29.0° on Saturday (wind, N.W.). Rain fell on six days to the amount of .742 inch, including .117 inch entered to Wednesday. Hail and snow fell on two days.

Very changeable, inclement weather held during the greater part of the week ended Saturday, the 16th, which began with a snowstorm and ended with warmth and squalls. On Sunday two depressions crossed Ireland and England—the first from W. to E., the second from W.N.W. to E.S.E.—both travelling with great speed. In Dublin, fine dry snow began to fall at 6 a.m., with a temperature of 29.0° . As the forenoon wore on, the snowfall increased. In the afternoon a thaw occurred and from rain and hail were followed by rain and a shift of wind from S.E. to W. In the evening a further shift of wind to N.N.E. took place and snow and hail again fell heavily. On Monday morning there was an intense frost. Tuesday was again fair and frosty, but at night a lunar halo foretold a change. Wednesday was dull and rainy, and at night there was a fresh gale from W.S.W., temperature rising to 33.1° . Thursday and Friday were cool, quiet days, but on Friday evening there was again a lunar halo, and Saturday was rainy and equally to mild and fine. At Dungeness, in Kent, temperature rose 26° (from 18° to 44°) in the twenty-four hours ending 8 a.m. of Thursday. In Dublin the mean height of the barometer during the week was 29.646 inches—pressure ranging from 29.180 inches at 6 p.m. of Sunday (wind, W.) to 29.667 inches at 9 a.m. of Tuesday (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 37.3° , while the mean temperature derived from the daily maxima and minima was 37.5° . The thermometers in the screen fell to 21.7° on Monday (wind, W.N.W.) and rose to 34.7° on Saturday (wind, W.S.W.). The rainfall amounted to 1.127 inches on four days. Of this quantity, .742 inch was the result of melted snow and hail on Sunday.

As regards the third week (17th–23rd, inclusive), at first mild, soft, and cloudy, the weather afterwards became cooler, drier, and lighter as barometrical gradients for northerly winds developed over Western Europe. Until Wednesday an anticyclone was found over Spain, the Bay of Biscay, and France; while areas of low pressure passed in a direction towards E. or S.E. across the Norwegian Sea and Scandinavia. Westerly winds and mild, cloudy weather prevailed during this period, except in the north of Sweden where the cold was very intense. On Thursday, the isobars ran nearly due N. and S., and the wind drew into N. with a general fall of temperature and cold showers in Great Britain. Next day a shallow depression passed southwards across Ireland, causing a higher temperature for the time being and showers. On Saturday the wind shifted to E. and became dry and scorching—the relative humidity in Dublin falling to 64 per cent at 9 p.m. In this city the mean height of the barometer was 30.001 inches—pressure ranging from 29.142 inches at 9 a.m. of Sunday (wind, W.S.W.) to 30.466 inches at 9 a.m. of Tuesday (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 44.9° , while the mean of the daily maxima and minima was 45.8° . Temperature in the screen rose to 54.5° on Monday (wind, S.W.) and fell to 35.1° on Friday (wind, W.). Rain was registered on four days, the total quantity being 1.09 inch, of which .060 inch was credited to Friday. At 8 a.m. of Saturday, February 23rd, temperature in Western Europe ranged from— 8° Fahr. at Huescaud in Sweden, 12° at Munich, and 19° at Lyons, to 47° at Belmullet and Valentia Island, Kerry.

Very inclement weather prevailed throughout the closing period of the month (from the 24th to the 28th, inclusive). Barometrical gradients for easterly (N. to E. and S.E.) winds held over Western

Europe, so that a polar air-current held, temperature ruled very low, and snow and hail fell frequently and on the east coasts of Great Britain and Ireland in considerable quantity. In the West of Ireland fine, bright, frosty weather prevailed for the most part, but in the East clouded skies and snow were experienced. At 8 a.m. of Thursday, the 28th, the thermometer was only 21° in the screen at Parnostown, King's Co.

The rainfall in Dublin during the two months ending February 28th has amounted to 4.682 inches on 36 days, compared with 2.344 inches on 23 days during the same period in 1888, and a 23 years' average of 4.424 inches on 35.0 days. Double as much rain as fell in January and February of last year has fallen in the same months this year.

At Greystones, Co. Wicklow, the rainfall in February, 1889, was 2.69 inches, distributed over 14 days. Of this quantity 1.12 inches fell in the form of snow on the 10th. Since January 1st, 6.20 inches of rain have fallen on, however, only 22 days.

MARCH.—This was a tolerably favourable month. North-westerly winds predominated as in February, and while the barometer was often high off the W. and S.W. of Ireland, atmospheric depressions passed south-eastwards across Scandinavia and the North Sea, producing cold N.W. winds and frequent showers. The beginning of the month was cold, but some genial weather was experienced from time to time.

In Dublin the mean temperature (44.0°) was above the average (43.3°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 43.3°. In the twenty-four years ending with 1888, March was coldest in 1867 and 1883 (M. T. = 39.0°) and warmest in 1868 (M. T. = 47.3°). In 1876, the M. T. was 41.2°, in the year 1879 (the cold year), it was 42.5°, in 1888 it was as low as 39.3°.

As a general rule, February in Dublin is only a shade colder than March. This is due to the fact that the Continental anticyclone embraces the British Isles and Scandinavia in March, causing easterly winds. In the present year, however, February was 37° colder than March.

The mean height of the barometer was 29.909 inches, or 0.076 inch above the average value for March—namely, 29.833 inches. The mercury rose to 30.546 inches at 9 p.m. of the 15th, and fell to 28.944 inches at 9 p.m. of the 19th. The observed range of atmospheric pressure was, therefore, as much as 1.602 inches—that is, more than an inch and a half. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 43.3°, or 37° above the value for February, 1889; that calculated by Kæmtz's formula from the means of the daily maxima and minima was 43.0°, or 0.3° above the average mean temperature for March, calculated in the same way, in the twenty years, 1865-84, inclusive (42.7°). The arithmetical mean of the maximal and minimal readings was 44.0°, compared with a twenty-three years' average of 43.3°. On the 28th, the thermometer in the screen rose to 58.4°—wind W.S.W.; on the 3rd, the temperature fell to 31.0°—wind, S.E. The minimum on the grass was 24.2° on the 27th. The rainfall was only 1.076 inches, distributed, however, over 17 days. The average rainfall for March in the twenty-three years, 1865-87, inclusive, was 3.030 inches, and the average number of rainy days was 16.4. The rainfall, therefore, was much below the average, while the rainy days were slightly above the average.

In 1867 the rainfall in March was very large—4.972 inches on 22 days; in 1888, 3.753 inches fell on 18 days; in 1866 also 3.429 inches fell on 21 days. On the other hand, in 1871, only .615 of an inch was measured on 12 days; and in 1874 only .953 inch fell, also on 12 days. In 1887 (the "dry year") 1.465 inches of rain fell on 15 days. A solar halo appeared on the 6th. The atmosphere was foggy on the 1st, 2nd, 15th, and 27th. High winds were noted on 9 days, reaching the force of a gale on 4 days—the 20th, 23rd, 24th, and the 25th. Snow or sleet occurred on the 1st and 2nd; and hail fell on the 1st, 2nd, 9th, 21st, and 31st. The temperature exceeded 50° in the screen on 16 days, compared with 8 days in February, and the same number of days in January; while it fell to or below 32° in the screen on 5 days, compared with only 4 in February and only 3 in January, but with 11 in March, 1888. The minima on the grass were 32°, or less, on 14 nights, compared with 21 nights in February and 16 nights in January. On 2 days the thermometer did not rise to 40° in the screen.

The month opened with very severe weather. At 8 a.m. of Saturday, the 2nd, the thermometer stood at 20° at Aberdeen, and 22° at Parnostown. The reading in Dublin at this time was 32°.

The weather of the week ending Saturday, the 9th, was very changeable and for the most part cold. At the beginning a keen S.E. wind blew, with heavy, dry weather. On Monday, the 4th, a close drizzling rain prevailed, while temperature did not exceed 40.1°. The two following days were chiefly fine and much milder, the thermometer reaching a maximum of 50.4° on Wednesday.

On this day the barometer gave way decidedly, and next morning two areas of low pressure were found—one off the north of Scotland, the other over St. George's Channel. The latter system caused the wind to shift to N.E. and N. on Thursday, with dull, cool weather in Ireland. Friday, the 8th, was cloudy but fine—a canopy of cirro-stratus moving from S.W. in an upper current, while the surface wind remained northerly. Saturday was bright, with some passing showers in the afternoon. In Great Britain very severe weather was experienced during the week. At first some intense frosts occurred over a snow-covered country—thus, the thermometer in the screen sank on Sunday to 14° at Cambridge, on Monday to 15° at Shields, and on Tuesday to 10° at Aberdeen. Afterwards, on Thursday and Friday, the depression above mentioned caused drenching rains or heavy falls of sleet and snow in England. In Dublin the mean height of the barometer was 29.798 inches—pressure ranging from 30.615 inches at 9 p.m. of Tuesday (wind, W.S.W.) to 29.389 inches at 9 p.m. of Friday (wind, N.N.W.). The mean dry bulb temperature at 9 a.m. (and 9 p.m.) was 39.0°. The arithmetical mean of the highest and lowest daily temperature was 39.6°. Temperature in the screen rose to 50.4° on Wednesday (wind, S.W.), having fallen to 31.0° on Sunday (wind, S.E.). The rainfall amounted to .163 inch, and was distributed over four days. The largest daily precipitation was .047 inch on Monday.

Very favourable weather was experienced during the second week (10th to the 16th, inclusive), particularly in Ireland, where temperature was high and the air mild after Monday, the 11th. On this day an area of high atmospheric pressure showed itself over Ireland, and this system held for several days, producing dry weather and N.W. winds. On Wednesday an area of low pressure passed southeastwards across the S. of Scandinavia and Denmark, causing snow and frost in those countries and low temperatures with cold showers in Great Britain also. At the close of the week the barometer was giving way in Ireland, where the wind backed towards W. with rising temperature and increasing cloud. In Dublin the mean height of the barometer was 30.314 inches, pressure increasing from 29.765 inches at 9 a.m. of Sunday (wind, W.) to 30.546 inches at 9 p.m. of Friday (wind, S.E.). The mean temperature was 46.3°, or 6.5° above the value for the previous week. The highest reading of the screened thermometers was 57.7° on Wednesday (wind, N.W.); the lowest was 31.7° on Monday (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 43.3°. Only a few light showers fell during the week, yielding 0.30 inch of water. Of this quantity 0.10 inch was measured on Monday and the same amount on Thursday. Except on Sunday and Wednesday, the percentage of cloud was high. Friday night was very cold in the S.E. of England, and severe frost prevailed in Germany and France on Saturday—at Munich the temperature at 8 a.m. was only 13°.

The chief feature in the weather-record of the third week was the passage across the British Islands of a very deep depression in the interval between Monday, the 18th, and Thursday, the 21st. At the beginning of the week the barometer was high and the weather was fine. During Sunday and Monday a great and uniform reduction of pressure took place, the wind backed to S.W. and S., with light showers and rising temperature. On Tuesday a well-marked depression, which hourly grew deeper, spread eastwards across Ireland and the Irish Sea to the North of England, where the barometer fell below 28.80 inches on Wednesday morning. By this time the wind had shifted to N. and N.E. in Ireland, and rose to a fresh or strong gale. The depression now changed its course, travelling southwards to France, where it "filled up" on Friday. A great deal of cold rain, wet snow, and hail fell in Great Britain in connection with this disturbance. During Friday and Saturday the wind once more backed to W.S.W., and freshened with a rainy appearance and higher temperature. In Dublin the mean height of the barometer was 29.746 inches—pressure decreasing from 30.264 inches at 9 a.m. of Sunday (wind, W.N.W.) to 28.944 inches at 9 p.m. of Tuesday (wind, W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 43.6°, while the mean of the daily highest and lowest readings was 43.8°. Temperature rose to 53.0° in the screen on Saturday (wind, W.S.W.), having fallen to 32.9° on Friday (wind, W.). Rain was measured on three days—the total precipitation amounting to .671 inch, of which .221 inch was caught on Monday, and .351 inch on Tuesday. A little hail fell on Thursday morning.

Fresh N.W. winds, cloudy skies, and chiefly mild weather characterised the week ending Saturday, the 30th. The barometer was throughout high in the S. and S.W., but comparatively low in the far N. On Wednesday an anticyclone, in which the barometer rose above 30.40 inches, advanced over Ireland, where a brief frost occurred. Next day this system had travelled southeastwards to Brittany and the mouth of the English Channel, in which regions the barometer stood above 30.60 inches. Temperature rose fast in Ireland, as a squally westerly wind spread over the country, and rain fell in considerable quantities. The last two days were very mild, but changeable and rather cloudy. On Saturday evening the sky cleared and temperature gave way quickly. Venus shone brightly in the western sky on several evenings. In Dublin the mean height of the barometer was 30.236 inches, pressure increasing from 30.006 inches at 9 a.m. of Monday (wind, W.N.W.) to 30.441 inches at 9 a.m. of Wednesday (wind also W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 47.3°, while the arithmetical mean of the daily maxima and minima was 48.1°. The thermometer in the screen rose to 58.3° on Thursday (wind, W.S.W.), having fallen to 31.3° on Wednesday (wind, N.W.). Rain fell on five days to the amount of 1.90 inch; the maximal fall in 24 hours was 1.02 inch on Wednesday, or rather early on Thursday morning.

The last day of the month—Sunday, the 31st—was squally, cold, and showery. A sharp hail-shower fell at 2 p.m.

The rainfall in Dublin during the three months ending March 31st has amounted to 5.738 inches on 43 days, compared with 6.097 inches on 41 days during the same period in 1888, and a 23 years' average of 6.454 inches on 51.4 days. While double as much rain as fell in January and February of last year fell in the same months this year, the rainfall in March of this year is not one-third that of March, 1888—namely, 3.753 inches.

At Greystones, Co. Wicklow, the rainfall in March, 1889, was 1.71 inches, distributed over only 7 days. Of this quantity .51 inch fell on the 18th. Since January 1st, 7.97 inches of rain have fallen on, however, only 29 days.

APRIL.—Like April, 1888, this was a generally cold, cloudy, changeable, showery month. It showed a low atmospheric pressure, and a preponderance of winds from polar points of the compass. In Dublin rain fell on as many as 21 days, and the total amount was more than 2½ inches. With the exception of 1879, 1881, 1887, and 1888, this was the coldest April experienced in Dublin since the present records were commenced in 1860.

In Dublin the mean temperature (46.1°) was decidedly below the average (47.6°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 45.6°. In the twenty-four years ending with 1888 April was coldest in 1879 (the cold year) (M. T. = 44.5°) and warmest in 1866 and 1874 (M. T. = 50.4°). In 1866, the M. T. was 46.2°, in 1887 it was as low as 45.1°, and in 1888 it was only 45.7°.

The mean height of the barometer was 29.748 inches, or 0.109 inch below the average value for April—namely, 29.857 inches. The mercury rose to 30.153 inches at 9 a.m. of the 18th, and fell to 29.179 inches at 9 a.m. of the 4th. The observed range of atmospheric pressure was, therefore, only 0.974 inch—that is, a little less than one inch. The mean temperature deduced from daily

R

readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 45° , or only 2° above the value for March, 1889; that calculated by Kæmitz's formula from the means of the daily maxima and minima was 45° , or 1° below the average mean temperature for April, calculated in the same way, in the twenty years, 1865-84, inclusive (47°). The arithmetical mean of the maximal and minimal readings was 46° , compared with a twenty-three years' (1865-1887, inclusive) average of 47° . On the 20th, the thermometer in the screen rose to 50° —wind W., on the 15th the temperature fell to 33° —wind N.W. The minimum on the grass was 26° on the same date. The rainfall was 2.607 inches, distributed over 21 days. The average rainfall for April in the twenty-three years, 1865-87, inclusive, was 2.034 inches, and the average number of rainy days was 14.5. The rainfall, therefore, was considerably above the average, while the rainy days much exceeded it. In 1877 the rainfall in April was very large—4.707 inches on 21 days; in 1882 also 3.326 inches fell on 20 days. On the other hand, in 1873, only .498 of an inch was measured on 8 days, and in 1870 only .888 of an inch fell, also on 8 days.

No solar halos were seen. The atmosphere was more or less foggy on the 10th, 12th, and 18th. High winds were noted on 10 days, but on only two occasions was the force of a gale attained—namely, on the 28th and 30th. Snow or sleet occurred on the 4th, and hail fell on the 21st, 22nd, 23rd, and 24th. The temperature exceeded 50° in the screen on 19 days, compared with 16 days in March, 8 days in February, and the same number of days in January. It did not fall to 32° in the screen on even one night. The minima on the grass were 32° , or less, on 8 nights, compared with 14 nights in March, 21 in February, and 16 nights in January. The mean lowest temperature on the grass was 34° , compared with 34° in 1888 and 31° in 1887. A peal of thunder was heard to the southward about 5 p.m. of the 30th.

Unsettled weather prevailed during the greater part of the period ending Saturday, the 6th. Temperature showed a marked decrease, and squally N.W. winds and cold showers were general. At the beginning of the period a depression was travelling southwards across the south of Scandinavia. Strong N.W. winds and showers of cold rain, sleet and hail were reported from many stations on Monday, the 1st. In Scotland Tuesday was a very inclement day. The barometer now gave way quickly, and a deep depression advanced from the N.W. over Ireland and England. It caused heavy rains in the N. of Ireland, and all over the country the weather became broken, gloomy, cold, and showery, continuing so until the end of the week. In Dublin the mean height of the barometer was 29.731 inches—pressure ranging from 30.037 inches at 9 a.m. of Tuesday (wind, N.N.W.) to 29.179 inches at 9 a.m. of Thursday (wind also N.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 43° . The arithmetical mean of the daily maxima and minima was almost the same—namely, 45° . The screened thermometers rose to 54° on Monday (wind, N.W.), and fell to 38° on Thursday (wind, N.N.W.). Rain was measured on three days, the total amount being .276 inch, of which .140 inch was registered on Thursday. Some sleet fell on this day. There were thunderstorms over the south of England on Friday, the 5th.

Many years have passed since so dull and wet and cold a period as that ended Saturday, the 13th, was experienced in April. A continuously low barometer for many days, chilly polar winds, densely overcast skies, frequent and abundant rainfalls, and an uniformly low temperature were the characteristics of this week. An usually happens when N.E. winds are prevalent, the weather was much worse on the east coast of Ireland than in the centre and western parts of this country. At 8 a.m. of Sunday, the 7th, the centre of a well-defined atmospheric depression was found off Ushant, so that easterly and north-easterly winds prevailed in the United Kingdom. In Dublin this day was very wet and cold. A short spell of sunshine on Monday morning was followed by a dull damp day. Tuesday was raw, gloomy, and damp; Wednesday showed a slight improvement; but Thursday was again cold and wet. On Friday the weather improved; and Saturday was dry, but cold. In Dublin the mean height of the barometer was only 29.539 inches—pressure ranging from 29.333 inches at 9 p.m. of Monday (wind, N.W.), to 29.921 inches at 9 p.m. of Saturday (wind, N.E.). The mean temperature deduced from readings of the dry bulb thermometers taken daily at 9 a.m. and 9 p.m., was 42° . The arithmetical mean of the highest and lowest daily temperatures was 43° . The shade temperature was highest (50°) on Friday (wind, N.E.), and lowest (39°) on Monday (wind, E.). Rain fell on six days to the amount of 1.096 inches—the maximal fall in 24 hours being .420 inch on Thursday. The atmosphere was foggy on Wednesday and Friday.

Favourable, dry weather prevailed during the third week (14th-20th inclusive). At first the air was dry and searching by day, frosty by night; but on Wednesday, the 17th, it became milder, and so continued to the end. From Sunday until Thursday an area of comparatively high atmospheric pressure was found over the Atlantic to the westward of Ireland, where the winds were, accordingly, northerly (N.E. to N.W.), and the weather was fine and dry. In Dublin sharp ground frosts occurred on each of the first three nights—the grass minima being 29° , 26° , and 28° , respectively. On Thursday the anticyclone (area of high pressure) moved southwards, and a warm south-westerly air current spread over Ireland and Scotland, causing higher temperatures and increasing cloud. On Friday night rain fell heavily in the N.W. of Ireland, but only a shower or two passed over Dublin. In this city the mean height of the barometer was 30.044 inches, pressure ranging between 30.153 inches at 9 a.m. of Thursday (wind, S.E.W.) and 29.731 inches at 9 p.m. of Saturday (wind, W.S.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 47° , or 5° , above the corresponding value for the previous week. The arithmetical mean of the highest and lowest daily temperatures was 47° . The thermometer rose nearly to 60° in the shade (screen) on Wednesday, Thursday, and Saturday—the actual values being 59° , 59° , and 59° respectively. On Monday the minimum in the shade was 33° , while that on the grass was as low as 28° . Rain fell on the night of Good-Friday, the 19th, to the amount of only .010 inch, and on Saturday night to the amount of .130 inch—total rainfall for the week = .130 inch, on two days.

Conditions were cyclonic over Northwestern Europe throughout the fourth week (21st-27th inclusive), and consequently the weather was unsettled, squally, and showery, with some finer intervals. Temperature ruled decidedly low for the time of year, and in Dublin fell on Sunday and the three following days. On Easter Day, April 21, the centre of an extensive atmospheric depression lay off the extreme N.W. of Scotland—the barometer at 8 a.m. ranged from 30.22 inches in the S.E. of France to 29.17 inches at Sornoway (Hebrides). Showers of rain and hail and squalls prevailed. On Tuesday another depression travelled southeastwards down the North Channel and across the Irish Sea to the centre and east of England. Heavy showers fell in all districts, and thunder and lightning with hail occurred at many places in England. On Friday a new V-shaped depression caused a heavy rainfall in Dublin. Towards the close of the week a tendency for southerly to take the place of northerly winds was perceptible. In Dublin the mean height of the barometer was 29.751 inches—pressure ranging from 29.384 inches at 7 p.m. of Tuesday (wind, W.), to 30.016 inches at 9 p.m. of Thursday (wind, S.E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 46.0°. The mean temperature derived from the highest and lowest daily readings was 46.5°. The screened thermometers rose to 54.7° on Tuesday (wind, W.), and fell to 39.1° on Monday (wind, N.N.W.). Rain fell on seven days to the total amount of 52.2 inch. The maximal rainfall in 24 hours was 3.70 inch on Friday (wind, S. to W.N.W.).

On Sunday, the 28th, a S.E. gale blew for some hours in Dublin, while great cold prevailed inland, and sleet and snow fell. Heavy showers fell on the 29th, and on the 30th there was another short-lived easterly to easterly gale. At 5 p.m. distant thunder was heard near Dublin, and great gloom occurred for a time.

The rainfall in Dublin during the four months ending April 30th has amounted to 8.345 inches on 74 days, compared with 8.090 inches on 58 days during the same period in 1883, 5.607 inches on 52 days during the same period in 1887, and a 23 years' average of 8.458 inches, on 66.2 days.

At Greystones, Co. Wicklow, the rainfall in April, 1889, was 2.01 inches, distributed over only 12 days. Of this quantity .48 inch fell on the 11th, and .41 inch on the 3th. Since January 1st, 9.96 inches of rain have fallen at Greystones, on, however, only 41 days.

MAY.—This was a very favourable month—singularly free from parching easterly winds, with a high mean temperature, and genial rainfall. The atmosphere was generally in a quiet state, no deep depressions and no gales being observed. In Dublin calms were of frequent occurrence, and in consequence morning fogs formed over the city.

In Dublin the mean temperature (54.6°) was much above the average (51.9°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 54.1°. In the twenty-four years ending with 1888, May was coldest in 1869 (M. T. = 48.2°), in 1885 (M. T. = 48.7°), and in 1879 (the "cold year" M. T. = 48.8°). It was warmest in 1868 (the "warm year") (M. T. = 55.8°) and 1875 (M. T. = 54.9°). In 1886, the M. T. was 50.3°, in 1887 it was 51.8°, and in 1888 it was 52.6°.

The mean height of the barometer was 29.790 inches or 0.206 inch below the average value for May—namely, 29.996 inches. The mercury rose to 30.113 inches at 9 p.m. of the 20th, and fell to 29.440 inches at 3 p.m. of the 29th. The observed range of atmospheric pressure was, therefore, only 0.673 of an inch—that is, a little less than seven-tenths of an inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 54.1°, or 8.5° above the value for April, 1889; that calculated by Kaemitz's formula from the means of the daily maxima and minima was 53.4°, or 2.5° above the average mean temperature for May, calculated in the same way, in the twenty years, 1865-84, inclusive (50.9°). The arithmetical mean of the maximal and minimal readings was 54.6°, compared with a twenty-three years' average of 51.9°. On the 21st, the thermometer in the screen rose to 72.5°—wind E.; on the 11th the temperature fell to 40.8°—wind calm. The minimum on the grass was 31.3° on this same date. The rainfall amounted to 2.131 inches, distributed over 17 days. The average rainfall for May in the twenty-three years, 1865-87, inclusive, was 2.072 inches, and the average number of rainy days was 15.5. The rainfall and the rainy days, therefore, were somewhat above the average. In 1886 the rainfall in May was very large—5.472 inches on 21 days; in 1869 also 5.414 inches fell on 19 days. On the other hand, in 1871, only .378 of an inch was measured on 9 days; in 1876 only .708 of an inch fell on 6 days; in 1887 only .982 of an inch fell 10 days; and in 1888 only .078 of an inch on 11 days.

There were solar halos on the 16th and 20th. The atmosphere was foggy on the 5th, 6th, 11th, 13th, 14th, 18th, 19th, 21st, and early morning of the 27th. High winds were noted on only 4 days, attaining the force of a gale on not one occasion. Hail occurred on the 31st. The only heavy falls of rain were on the 5th (.509 inch), and on the 12th (.453 inch). There were no electrical disturbances in Dublin.

The first four days were changeable, with a damp atmosphere and cloudy sky on Friday and Saturday, the 3rd and 4th.

During the week ended Saturday, the 11th, the weather was again changeable, with some heavy rainfalls in Ireland, but temperature showed a decided advance. Sunday and Thursday were very wet days in Dublin, while Monday, Tuesday, and Saturday were equally fine. Rain fell for many hours on Sunday, and in the evening a severe thunderstorm occurred in Ulster. A dense vapour fog next morning gave place to brilliant sunshine. Then came two tolerably fine, but not settled, days—to be followed by a very wet day (Thursday). Friday was at first squally with a fine drizzle, but the afternoon proved fair, and the following night was cold. Saturday was a very fine day, with lofty cirrus from S.E. In Dublin the mean height of the barometer was 29.763 inches—pressure receding to 29.548 inches at 9 p.m. of Thursday (wind E.S.E.), and increasing to 29.912 inches at 9 p.m. of Saturday (wind, light from E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 52.6°. The mean of the daily maxima and minima in the screen was 53.2°. On

R 2

Tuesday the shade thermometer rose to 62° (wind, W.S.W.). This was the first occasion this season upon which temperature in Dublin exceeded 60° in the shade. On Saturday the minimum in the shade was 40·5°, and on the grass it was 31·9° (wind, calm). Rain was measured on four days, the total amount being 1·081 inches, of which ·609 inch was registered on Sunday (wind, S. to N.W.). Very high temperatures (70°—77°), were recorded in central and eastern England during this week. On Friday an area of low pressure approached England from Germany, causing a heavy rainfall.

Cloudy, dull, quiet weather prevailed during the period from the 12th to the 18th inclusive. At the beginning of the week a cyclone, in which the gradients, however, were not steep, was found with its centre over Norfolk, whence it had travelled slowly from Germany. Much rain fell in eastern and central England in connection with this system, and even in Dublin ·453 inch of rain was measured on Monday morning. This depression gradually filled up and dispersed, when atmospheric pressure became so uniform over Western Europe that on Tuesday morning (the 14th) the barometer readings over the whole of our islands, the North Sea, the Netherlands, Denmark, the South of Scandinavia, France and Germany were all within one-tenth of an inch of each other. Consequently, very light, variable winds and quiet weather prevailed. On the afternoon of this day a severe thunderstorm occurred in the north-east of Ireland and south-west of Scotland. A solar halo appeared in Dublin on Thursday afternoon, and Friday proved a damp, dropping day. Saturday was at first cloudy, but afterwards bright and warm. In Dublin the mean height of the barometer was 29·919 inches, pressure ranging only from 29·780 inches at 9 p.m. of Tuesday (wind, calm), to 29·997 inches at 9 a.m. of Friday (wind, S.S.E., light). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 53·1°, while the mean daily highest and lowest readings of the screened thermometers were 53·2°. The highest shade temperature was 62·6° on Saturday (wind, variable); the lowest was 41·9° on Tuesday (wind, E.N.E.). Rain fell on three days to the amount of ·504 inch—the heaviest rainfall in 24 hours being ·453 inch on Sunday (wind, W.S.W. to N.W.).

Favourable weather held throughout the week ending Saturday, the 25th, in Dublin, where only light showers fell on Friday. Until that day temperature ruled unusually high for the time of year—the daily maxima in the screen being 66·3°, 69·6°, 72·5°, 68·6°, and 67·5° respectively. On Wednesday a gradual fall of the barometer set in and continued until Friday morning, when pressure fell to 29·5 inches in the Hebrides and 29·6 inches at Roche's Point, Co. Cork. On Thursday severe thunderstorms were reported from the east of England, and at night heavy rain set in over the north and north-west of Ireland. On this day temperature rose to 52° in London and to 51° at Loughborough and Cambridge. Early on Friday a rapid fall of temperature occurred in Ireland, so that in Dublin the thermometer did not exceed 50·0° on this day, while it fell to 42·1° in the screen and to 35·2° on the grass during the ensuing night. The mean height of the barometer was 29·832 inches—pressure rising to 30·113 inches at 9 p.m. of Monday (wind, E.), and falling to 29·584 inches at 7 a.m. of Friday (wind, S.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 53·3°, while the mean of the highest and lowest daily readings was 58·5°. The screened thermometers rose to 72·5° on Tuesday (wind, E.N.E.), and fell to 42·1° on Saturday (wind, N.N.W.). Rain fell on Friday to the amount of only ·010 inch.

Throughout the closing period (Sunday, 26th, to Friday, 31st) much less settled weather prevailed. At first the barometer was lowest over the Continent, and large quantities of rain fell in England, while the weather was comparatively fine in Ireland. From Tuesday, the 28th, however, the lowest pressures were found off the northwest and west of Ireland, so that fresh to strong southerly (S.E. to S.W.) winds and frequent showers were experienced. Thunder and lightning accompanied the showers in several places, but—as often happens—Dublin escaped the electrical disturbances. During this period, the barometer ranged between 29·832 inches at 9 a.m. of Monday (wind, E.) and 29·440 inches at 3 p.m. of Tuesday (wind, S.). On Monday, the 27th, the thermometer rose to 64·6° in the shade (wind, E.S.E.), the minimum during the previous night having been 44·1°.

During the month the thermometer in the screen did not fall below 40·8° (on the 11th), and on only one night was a temperature of 32° or less recorded on the grass. The mean minimal temperature on the grass was 42·4°, compared with 37·5° in May, 1888, and 37·9° in May, 1887.

The rainfall in Dublin during the five months ending May 31st has amounted to 10·476 inches on 91 days, compared with 9·063 inches on 69 days during the same period in 1888, 6·489 inches on 62 days in 1887, and a 23 years' average of 10·560 inches, on 81·7 days.

At Greystones, Co. Wicklow, the rainfall in May, 1888, was 3·13 inches, distributed over only 10 days. Of this quantity 61 inch fell on the 3rd, 47 inch on the 4th, and 39 inch on the 28th. Since January 1st, 1811 inches of rain have fallen at Greystones, on, however, only 51 days.

JUNE.—This month shows a marked resemblance to June, 1887, which will be long remembered as one of the driest and warmest months on record in Dublin. The mean temperature fell indeed 2·8° short of that of June, 1887, but it was still 1·7° above the average; the mean height of the barometer also was 136 inch lower, but it was 153 inch above the average for the month; and there was even a greater deficiency of rainfall than had occurred in June, 1887. Lastly, there was again a preponderance of easterly and north-easterly winds, with the same uneventful fine summer weather which was so characteristic of the Queen's Jubilee summer.

In Dublin the mean temperature (59·5°) was decidedly above the average (57·8°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 60·0°. In the twenty-four years ending with 1888, June was coldest in 1882 (M. T. = 55·8°) and in 1879 (the "cold year") (M. T. = 55·9°). It was warmest in 1887 (M. T. = 62·3°), in 1865 (M. T. = 61·0°), and in 1868 (the "warm year") (M. T. = 60·5°). In 1888 the M. T. was 57·6°, and in 1888 it was 56·2°.

The mean height of the barometer was 30·077 inches or 0·158 inch above the average value for June—namely, 29·924 inches. The mercury marked 30·482 inches at 9 a.m. of the 5th, and fell to

59.661 inches at 9 a.m. of the 2nd. The observed range of atmospheric pressure was, therefore, 0.421 of an inch—that is, a little more than eight-tenths of an inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 60.0°, or 5.0° above the value for May, 1889; that calculated by Kaemle's formula from the means of the daily maxima and minima was 58.2°, or 1.6° above the average mean temperature for June, calculated in the same way, in the twenty years, 1865–84, inclusive (56.6°). The arithmetical mean of the maximal and minimal readings was 59.5°, compared with a twenty-three years' average of 57.8°. On the 22nd, the thermometer in the screen rose to 74.8°—wind E.N.E.; on the 11th the temperature fell to 41.2°—wind N.E. The minimum on the grass was 36.3° on the latter date. The rainfall amounted to only one-tenth of an inch (100 inch), distributed over 6 days. There was no measurable rainfall in Dublin after the 14th, and not since September, 1865—when only 0.66 inch was registered on three days—has so comparatively rainless a month occurred at this station. The average rainfall for June in the twenty-three years, 1865–87, inclusive, was 1.630 inches, and the average number of rainy days was 14.0. The rainfall and the rainy days, therefore, were remarkably below the average. In 1878 the rainfall in June was very large—5.058 inches on 19 days; in 1879 also 4.046 inches fell on 24 days. On the other hand, in 1874, only .405 of an inch was measured on 9 days; and in 1868 only .677 of an inch fell on but 6 days.

In 1887 the rainfall was only .252 of an inch, distributed over only 5 days; in 1888 it was as much as 3.045 inches, distributed over as many as 18 days.

High winds were noted on 5 days, but did not attain the force of a gale on any occasion. Temperature reached or exceeded 70° in the screen on 10 days, as compared with 17 days in 1887, and only one day in 1888. Luminous cirri were seen from Dublin on the northern horizon on the night of the 7th. There were no electrical disturbances in or near Dublin.

The first day of the month was cloudy, squally, and showery.

So far as Dublin is concerned, beautiful weather was experienced in the week ending Saturday, the 8th. Only on the afternoon of Monday and Saturday were conditions unsettled and slight rain fell. The amount of cloud at other times was small, and much brilliant sunshine was enjoyed. At the beginning of the week an extensive depression, which had caused a fresh gale and very heavy rain in the S. and W. of Ireland on Saturday the 1st inst., was passing away over the Atlantic. Temperature rose on Sunday the 2nd, to 82° in London, 83° at Cambridge, and 84° at Loughborough, and in the afternoon violent thunderstorms, with hail, occurred in many parts of Great Britain. An area of high pressure now advanced northwards over the British Islands from France and beautiful weather set in, lasting until Thursday. Towards night on this day a small depression developed over the eastern part of the English Channel and severe thunderstorms again became prevalent in England. On Saturday another depression appeared in the N.W. causing some rain in Dublin. The approach of this system was heralded on Friday night by the appearance of luminous clouds on the northern horizon. In Dublin the mean pressure was 30.078 inches—highest 30.462 inches at 9 a.m. of Wednesday (wind, E.); lowest, 29.661 inches at 9 a.m. of Sunday (wind, S.E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 59.0°. The mean of the maxima and minima combined was 58.4°. The shade thermometer rose to 71.3° on Thursday (wind, E.), and fell to 44.1° on Saturday (wind, W.N.W.). Rain fell on two days to the amount of 0.44 inch, of which .032 inch was registered on Saturday.

During the second week (9th–15th, inclusive), strange contrasts of weather were experienced in different parts of the United Kingdom. Thus, while clear skies and brilliant sunshine reigned supreme in Ireland during the first three days, over the greater part of England there were gloomy skies, low temperature, strong N.E. winds, and heavy rains. Whitsun Monday, the 10th, which was a cloudless day in Dublin, was cold and wet as a day in midwinter in London. This singular contrast was brought about by the presence of a trough of low barometrical pressure over the north of France, Holland, and Denmark, while the barometer was high and rising in Ireland and Scotland. After Tuesday this distribution of pressure gave place to irregular and slight gradients for S.W. and W. to N.W. winds, so that the weather became less settled in Ireland, but improved in England. In Dublin the mean height of the barometer during the week was 29.833 inches, pressure ranging between 29.633 inches at 9 p.m. of Thursday (wind, S.S.W.) and 30.090 inches at 9 p.m. of Saturday (wind light from N.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 57.6°, while the mean of the daily maxima and minima was 57.7°. Temperature in the screen rose to 68.5° on Thursday (wind southerly), having fallen as low as 41.2° on Tuesday morning (wind, N.E.). The rainfall was only .046 inch, distributed over three days. Since June 1 only 100 inch of rain had fallen in Dublin, on six days. Up to Saturday, the 15th, 1.960 inches had been measured in London, on however only five days.

Quiet, summerlike weather prevailed in Ireland throughout the third week (16th–22nd, inclusive). Less settled conditions, with fresh N.E. winds, and at times a good deal of cloud, were reported from Great Britain. All through, an anticyclone of medium intensity held over the British Islands, while areas of relatively low pressure appeared from time to time over the Baltic and Germany and France. The first three and the last two days were almost cloudless in Dublin, although the atmosphere was hazy. During the earlier part of Wednesday and Thursday the sky was overcast, but in the afternoons of both these days the cloud canopy broke up. There were some heavy thunderstorms in France each day after Monday. In Dublin the mean height of the barometer was 30.190 inches, pressure ranging only from 30.200 inches at 9 a.m. of Tuesday (wind, E.) to 30.118 inches at 9 p.m. of Thursday (wind, calm). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 61.2°, while the mean daily maxima and minima combined were 60.3°. The screened thermometers rose

to 74° on Saturday, having fallen to 40° on Sunday. There was no rain during the week. The wind varied between E. and N., except sometimes at night when a light westerly land breeze was felt in Dublin. On Wednesday and Thursday the easterly wind freshened considerably.

The period from the 23rd to the 29th inclusive was another week of quiet, summerlike weather. After Tuesday, the easterly breezes, which had been so prevalent, gave place to light and variable, or moderate, westerly winds. Barometrical gradients were slight and irregular throughout. On Tuesday and the two following days thunderstorms occurred in different parts of France. In the British Islands only a few showers fell during the week. After Tuesday daily maxima of 80° or upwards were recorded at several English stations. In Ireland the thermometer rose (at Personstown) to 77° on Sunday. In Dublin the mean height of the barometer was 30.128 inches, pressure ranging from 30.044 inches, at 9 a.m. of Monday (wind, E.), to 30.273 inches at 9 a.m. of Saturday (wind, N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 62.2°. The mean temperature deduced from the daily highest and lowest readings was 62.6°. The shade maxima exceeded 70° on four days—the absolute maximum being 75.5° on Wednesday (wind, W.N.W.). The minimum for the week was 52.1° on Tuesday (wind, calm). A few large "spots" of rain were observed about 5 p.m. of Wednesday, and at 8 p.m. of Saturday a light shower fell, yielding only three-thousandths of an inch of water—less than the standard minimal rainfall for measurement.

Sunday, the 30th, was at first cloudy and then fair. In the afternoon the air was very dry, and a peculiar yellowish-gray haze overspread the sky.

The rainfall in Dublin during the six months ending June 30 has amounted to 10.576 inches on 97 days, compared with 12.113 inches on 87 days during the same period in 1888, 6741 inches on 67 days in 1887, and a 23 years' average of 12.399 inches, on 95.7 days.

At Greystones, Co. Wicklow, the rainfall in June, 1889, was 15 inch, distributed over only 2 days. Of this quantity 13 inch fell on the 3rd. Since January 1st, 13.26 inches of rain have fallen at Greystones, on, however, only 53 days.

JULY.—Warm and fine at the beginning and close, this month on the whole proved changeable showery, and cool, with a great preponderance of North-westerly winds—a very common state of things in an Irish July. Speaking generally, however, the weather was favourable from both a sanitary and an agricultural point of view.

In Dublin the mean temperature (58.7°) was decidedly below the average (60.6°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 58.3°. In the twenty-four years ending with 1888, July was coldest in 1879 (the "cold year") (M. T. = 57.2°). It was warmest in 1887 (M. T. = 63.7°), and in 1868 (the "warm year") (M. T. = 63.5°). In 1888, the M. T. was 61.0°; in 1885, it was as low as 57.3°. From this, 1887 proves to have been the warmest since the present records commenced, whilst July, 1868, was almost the coldest.

The mean height of the barometer was 29.144 inches or 0.022 inch above the average value for July—namely, 29.122 inches. The mercury marked 30.520 inches at 9 a.m. of the 1st, and fell to 29.498 inches at 9 a.m. of the 21st. The observed range of atmospherical pressure was, therefore, 1.022 inch—that is, a little more than an inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 58.3°, or 1.7° below the value for June, 1889; that calculated by Eschsch's formula from the means of the daily maxima and minima was 57.4°; or 2.2° below the average mean temperature for July, calculated in the same way, in the twenty years, 1865–84, inclusive (59.6°). The arithmetical mean of the maximal and minimal readings was 58.7°, compared with a twenty-three years' average of 60.8°. On the 6th, the thermometer in the screen rose to 77.8°—wind W.N.W.; on the 8th the temperature fell to 44.0°—wind N.E. The minimum on the grass was 38.6° on the latter date. The rainfall was 2.579 inches, distributed over 15 days. The average rainfall, for July in the twenty-three years, 1865–87, inclusive, was 2.850 inches, and the average number of rainy days was 17.1. The rainfall therefore, was somewhat above the average, while the rainy days were below it. In 1880 the rainfall in July was very large—6.987 inches on 24 days; in 1871 also 4.301 inches fell on 25 days. On the other hand, in 1870, only .330 of an inch was measured on 8 days; in 1869, the fall was only .730 of an inch on 9 days, and in 1868, only .741 of an inch fell on but 5 days.

High winds were noted on 8 days, but attained the force of even a moderate gale on only two occasions—viz, the 21st and 27th. Temperature reached or exceeded 70° in the screen on only two days. In July, 1887, temperature reached or exceeded 70° in the screen on no fewer than 17 days. In July, 1888, the maximum was 68.7°. There was a storm of thunder, lightning, and heavy rain and hail on the 16th. Fog was observed on the 9th and 30th.

The drought observed in June continued through the first week, but until Saturday, the 6th—which was a really hot day—temperature ruled lower than in the previous week. The prevailing distribution of atmospherical pressure was anti-cyclonic over the British Islands, with areas of relatively low barometer over both the Baltic and the Mediterranean. At the beginning and close of the week the wind was northwesterly, but in the interval light to moderate easterly breezes (E. to N.E.) prevailed. Up to and including Wednesday the mornings were cloudy—indeed on Tuesday, the 2nd, slight drizzle was observed at 7.30 a.m. Electric cirri showed on Thursday afternoon, and the atmosphere was generally hazy through the week. On Saturday a remarkable rise of temperature occurred—the maximum, 77.3°, being also the maximum of the present season so far as it has gone. In Dublin the mean height of the barometer was 30.295 inches, pressure ranging from 30.520 inches at 9 a.m. of Monday, the 1st (wind, N.W.) to 29.926 inches at 9 p.m. of Saturday, the 6th (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 61.6°. The mean of the daily highest and lowest shade readings of the thermometer was 61.7°. The screened thermometers rose to 77.8° on Saturday, having fallen to 50.1° on Thursday.

Although less settled than before, the weather was most favourable in all respects throughout the second week (7th-13th inclusive). Early on the morning of Sunday, the 7th, sharp showers fell, yielding a rainfall of '019 inch—the first recorded since June 14. Rain fell on Tuesday and Wednesday abundantly over the greater part of the United Kingdom, the west and centre of Ireland only escaping the copious showers. On Sunday rather a deep barometrical depression lay over the S. of Norway, and fresh N.W. winds with cool changeable weather prevailed in the British Isles. On Monday morning a new depression appeared off the Land's End, whence it travelled slowly to the S. of Ireland, causing the copious rains already mentioned. On Wednesday this system began to move rapidly in a northeasterly direction, and in 24 hours its centre reached the Christiania Fjord, in Norway. Fine, clear weather now set in, so that Snowden was seen from the Wicklow Coast on Thursday afternoon. On Friday and Saturday very shallow disturbances led to local showers or rains in parts of England and Ireland. In Dublin the mean height of the barometer was 29.847 inches, pressure ranging from 29.586 inches, at 9 a.m. of Wednesday (wind, W.N.W.), to 29.031 inches at 9 p.m. of Friday (wind, E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 57.7°. The mean of the daily highest and lowest temperatures in the screen was 58.1°. The shade thermometers rose to 69.5° on Thursday (wind, W.S.W.), having fallen to 44.0° on Monday (wind, N.E.). Rain fell on four days to the amount of .757 inch. The heaviest fall in 24 hours was .455 inch on Tuesday.

During the week ended Saturday, the 20th, changeable, cloudy, and cool weather was general over the Northwest of Europe. The distribution of atmospheric pressure was cyclonic—systems of low pressure, with secondary shallow depressions, causing heavy showers in most places from time to time. On Sunday, the 14th, the atmosphere was very clear, so that the Mourne and Welsh Mountains were plainly seen from the Co. Wicklow. On Monday and Tuesday heavy showers of rain and hail, with occasional thunder and lightning, prevailed in and about Dublin. Three fine, but cloudy, cool days followed, but on Friday night a depression of considerable intensity brought a fresh rainfall. Saturday was close and showery at first, but in the afternoon the weather improved. In Dublin the mean height of the barometer was 29.851 inches, pressure ranging between 30.020 inches at 9 a.m. of Thursday (wind, N.W.), and 29.533 inches at 1 p.m. of Saturday (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 56.3°. The arithmetical mean of the daily highest and lowest shade temperatures was 56.2°. On Wednesday the thermometer rose to 64.6°, having fallen during the preceding night to 46.0°. Rain fell on four days—the total measurement being .723 inch. The largest rainfall in 24 hours was .279 inch on Tuesday. Nearly as much (.260 inch) was credited to Friday. Hail, thunder, and lightning were observed on Tuesday.

In the fourth week (21st-27th inclusive), the weather was again very unsettled, but on Thursday the rain ceased, and bright sunshine, with high, bracing, northerly winds took their place. Atmospheric pressure was very unstable—a series of depressions passing eastwards along irregular paths until Saturday, when a system of high barometer became established over the West of Ireland. Very heavy showers fell in and about Dublin on the first three days of the week—the resulting measurement of rain being nearly an inch, including .634 inch registered on Monday. Wednesday broke dull and wet, but in the afternoon conditions improved. During the last three days of this week very strong northerly (N.W. to N.) winds prevailed, accompanied at first with cloudy, but afterwards with clear, bracing weather. In Dublin the mean height of the barometer was 29.773 inches, pressure having fallen to 29.408 inches at 9 a.m. of Sunday (wind, W.S.W.) and risen to 30.097 inches at 9 p.m. of Saturday (wind, N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 55.9°. The mean of the daily maxima and minima was 57.7°—the highest shade temperature was 68.6° on Saturday; the lowest was 48.9° on Thursday. Rain fell on five days to the amount of 1.048 inches. The heaviest downpour in 24 hours was .634 inch on Monday.

During the last four days, quiet summer-like weather prevailed. On the 29th and 30th there was much fog in the Irish Sea, and on the 31st a considerable increase of temperature took place.

The rainfall in Dublin during the seven months ending July 31st has amounted to 13.146 inches, on 112 days, compared with 7.935 inches on 80 days during the same period in 1887, 15.094 inches on 109 days in 1888, and a twenty-three years' average of 14.749 inches, on 112.8 days.

At Greystones, Co. Wicklow, the rainfall in July, 1889, was 2.42 inches, distributed over 15 days. Of this quantity .60 inch fell on the 9th, .32 inch on the 18th, and .20 inch on the 26th. Since January 1, 15.68 inches of rain have fallen at Greystones, on, however, only 65 days.

AUGUST.—August, 1889, proved a wet, cold, and stormy month. Rain fell on as many as 22 days—the fall amounting to 1.309 inches on the 10th, and to 1.943 inches on the 19th. The mean temperature was 1.2° below the average, and strong or squally winds between S.W. and N.W. prevailed on no fewer than 14 days. As regards temperature conditions were almost identical with those observed in August, 1888.

In Dublin the mean temperature (58.6°) was decidedly below the average (59.6°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 57.6°. In the twenty-four years ending with 1888, August was coldest in 1881 (M. T. = 57.0°), and warmest in 1871 (M. T. = 63.0°). In 1883, the M. T. was only 57.1°; in 1879 (the "cold year"), it was 57.7°; in 1887, it was 60.3°; and in 1888, it was 58.2°.

The mean height of the barometer was 29.852 inches, or 0.052 inch below the average value for August—namely, 29.904 inches. The mercury marked 30.262 inches at 9 a.m. of the 31st, and fell to 29.145 inches at 3 p.m. of the 21st. The observed range of atmospheric pressure was therefore 1.117 inches—that is, a little more than an inch and one-tenth. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 57.6°, or exactly the same as in August, 1888, and 0.7° below the value for July, 1889; that calculated by Raoult's formula from the means of the daily maxima and minima was 57.4°, or 1.4° below the

average mean temperature for August, calculated in the same way, in the twenty years 1865-84, inclusive (58°). The arithmetical mean of the maximal and minimal readings was 58°6', compared with a twenty-three years' average of 59°8'. On the 1st the thermometer in the screen rose to 71°9'—wind, S.W.; on the 25th the temperature fell to 46°4'—wind, N.N.W. The minimum on the grass was 40°1' on the latter date. The rainfall was 3·747 inches, distributed over 32 days. The average rainfall for August in the twenty-three years, 1865-87, inclusive, was 2·766 inches, and the average number of rainy days was 15·3. The rainfall, therefore, was more than twice the average, and the rainy days were also considerably in excess of the average. In 1874 the rainfall in August was very large—4·046 inches on 18 days—and in 1868 also 4·745 inches fell on, however, only 13 days. On the other hand, in 1884, only 777 inch was measured on 8 days. In 1887, 1·520 inches of rain fell on 16 days, and in 1888, 1·270 inches on 12 days.

High winds were noted on as many as 14 days, and attained the force of a gale on at least two occasions—namely, the 6th and 26th. The atmosphere was foggy on the 31st. Thunder was heard on the 7th and 11th, and lightning was seen on the 30th. Temperature reached or exceeded 70° in the screen on only two days—or 8 fewer than in August, 1887, and one more than in August, 1888.

On Thursday, the 1st, heavy showers began to fall at intervals, and continued to do so during the two next days.

Very unsettled showery weather prevailed throughout the week ending Saturday, the 10th, and from Monday evening until Wednesday morning the wind was fresh or strong in force. Rain fell in drenching showers, and occasional thunder and lightning accompanied the showers. The barometer stood relatively high in France and Germany, while a series of atmospheric depressions of some intensity passed in an easterly, or north-easterly, direction across the British Isles, the North Sea, and Scandinavia. Hence the prevalence of equally south-westerly (S. to W. and N.W.) winds and heavy thunder showers. In Dublin Sunday and Friday were tolerably fine days. Heavy showers fell on Monday and Tuesday. There was a moderate gale from W. to N.W. on Monday night. At 4 p.m. of Wednesday a local easterly sea breeze caused dense rainclouds to form and at 5·30 p.m. a flash of lightning and clap of thunder were followed by torrents of rain—the measurement from the shower being 4·50 of an inch in less than half an hour. On Saturday rain again fell in large quantities over the city for several hours. In Dublin the mean height of the barometer was 29·800 inches, pressure ranging from 30·077 inches at 9 p.m. of Wednesday (wind, W.), to 29·526 inches, at 9 p.m. of Saturday (wind, W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 57°6'. The mean of the daily highest and lowest shade temperature was 59°1'. The thermometer rose to 68°6' in the shade on Wednesday, and fell to 52°0' on Tuesday. Rain fell on six days to the large amount of 2·341 inches—the maximal fall in 24 hours being 1·300 inches on Saturday (wind, S.E.). Thunder and lightning occurred on Wednesday.

A cyclonic distribution of atmospheric pressure and changeable weather held during the second week (11th-17th inclusive). On Sunday, the 11th, a complex area of low pressure lay over England and the North Sea—in Ireland, northerly winds and sharp thunderstorms were felt, and the weather was everywhere unsettled. By Tuesday morning, the centre of the system, which had become much deeper, had reached the Baltic, the barometer reading only 29·06 inches at Wisby, in Gothland. The weather was now fine in Ireland, but in the course of Tuesday night a new disturbance arrived off Donegal, accompanied by a heavy downpour of rain. Fresh or squally S.W. to N.W. winds prevailed until Thursday evening. On Friday afternoon another depression approached Ireland from the Atlantic, causing heavy showers and a renewal of squalls—first from S.W. and then from W. In Dublin the mean height of the barometer during the week was 29·535 inches, and pressure ranged from 30·065 inches, at 9 a.m. of Tuesday (wind N.N.W.), to 29·572 inches, at 9 p.m. of Friday (wind, S.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 55°3'. The mean of the daily highest and lowest readings of the screened thermometers was 59°4'. The highest shade temperature was 69°8' on Friday; the lowest was 50°2' on Tuesday. Rain fell on four days to the amount of 5·59 inch—the heaviest fall in 24 hours being 2·90 inch on Tuesday.

Exceedingly broken and unseasonable weather held throughout the third week (18th-24th inclusive). Large quantities of rain fell in all parts of the United Kingdom, France, and Scandinavia, and westerly (S.W. to N.W.) gales of unusual severity for August were reported from the coast stations. On Sunday, the 18th, the isobars ran in almost straight lines from W. to E. across the British Isles, the North Sea, Denmark, and Northern Germany—the resulting westerly wind was high, but no heavy rainfalls occurred. During the remainder of the week, however, a series of deep atmospheric depressions passed north-eastwards across Ireland and Scotland, and to these the gales and rains were due. By Tuesday morning about 2 inches of rain had fallen over the greater part of Ireland, and a similar downpour had begun in Scotland. On Wednesday another depression travelled quickly across the North of Ireland and of England, renewing the bad weather. The remainder of the week was cold, showery, and squally, with strong N.W. winds. In Dublin the mean height of the barometer was 29·659 inches, the readings varying between 29·970 inches at 9 a.m. of Friday (wind, W.N.W.), and 29·145 inches at 3 p.m. of Wednesday (wind, W.). The mean temperature at 9 a.m. and 9 p.m. was 55°4'. The mean of the daily extreme temperatures was 56°0'. The shade thermometers rose to 62°6' on Sunday and Tuesday, and fell to 48°4' on Friday. Rain fell every day; the total measurement being 2·574 inches, of which 1·942 inch was registered on Monday.

A marked improvement in the weather took place in the week (25th-31st inclusive), at all events over the greater part of the country. In the northwest and north of Ireland and in Scotland, indeed, bad weather prevailed from Tuesday to Friday, owing to the passage of a storm-centre north-eastwards across those districts. But in the east and south of Ireland and in England very little

rain fall, and a return of summer temperatures was observed. On Friday the thermometer rose to 83° in London and to 82° at Oxford and Cambridge. The wind was N.W. on Sunday and Monday. It then backed to W. and S.W., and freshened considerably, under the influence of a depression which skirted the west coasts of Ireland and Scotland, causing gales and rains as noticed above. On Friday the wind died down, and a light easterly breeze and clear sky succeeded a calm foggy morning on Saturday. In Dublin the mean height of the barometer was 30.129 inches, pressure ranging from 29.942 inches at 9 a.m. of Sunday (wind, N.N.W.), to 30.352 inches at 9 a.m. of Saturday (wind, calm). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 57.0°. The arithmetical mean of the daily maximal and minimal temperatures in the screen was 57.6°. The shade thermometers rose to 69.5° on Wednesday, having fallen to 46.4° on Sunday. Rain fell on two days to the amount of only .020 inch—.010 inch on Monday, and .010 inch on Friday. There was a smoke fog in the city on Saturday morning, and sheet lightning was seen on Friday night.

The rainfall in Dublin during the eight months ending August 31st has amounted to 18.608 inches on 184 days, compared with 4.455 inches on 36 days during the same period in 1887, 17.954 inches on 121 days in 1888, and a twenty-three years' average of 17.515 inches, on 129.1 days.

At Greystones, Co. Wicklow, the rainfall in August, 1889, was 4.410 inches, distributed over 17 days. Of this quantity, 2.050 inches fell on the 10th, .530 inch on the 21st, and .440 inch on the 2nd. Since January 1, 20.090 inches of rain have fallen at Greystones, on, however, only 83 days.

At Carrickmines, County Dublin, the rainfall in August was 5.641 inches, on 21 days; and since January 1, 30.483 inches have fallen at that station on 121 days.

SEPTEMBER.—As in 1888, so in 1889, September proved a fine month, with a high mean barometer, winds from polar quarters—chiefly N.W., a moderate rainfall, and normal temperature. At the beginning of the month fogs were prevalent along the sea coast, and towards the close strong and squally winds were experienced on several days.

In Dublin the mean temperature (55.6°) was exactly equal to the average (55.6°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 55.1°. In the twenty-four years ending with 1888, September was coldest in 1866 and in 1882 (M.T. = 53.0°), and warmest in 1865 (M.T. = 61.4°). In 1880, the M.T. was as high as 58.6°; in the year 1879 (the "cold year"), it was 54.3°; in 1887, it was 54.0°; and in 1888, it was 54.4°.

The mean height of the barometer was 30.064 inches, or 0.157 inch above the average value for September—namely, 29.917 inches. The mercury rose to 30.455 inches at 9 a.m. of the 15th, and fell to 29.504 inches at 9 p.m. of the 23rd. The observed range of atmospheric pressure was, therefore, .951 of an inch—that is, a little less than one inch. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 55.1°, or 2.5° below the value for August, 1889; that calculated by Kaemts's formula from the means of the daily maxima and minima was 54.8°, or 0.8° below the average mean temperature for September, calculated in the same way, in the twenty years, 1866-84, inclusive (55.1°). The arithmetical mean of the maximal and minimal readings was 55.8°, compared with a twenty-three years' average of 55.8°. On the 11th the thermometer in the screen rose to 69.7°—wind, W.S.W.; on the 25th the temperature fell to 38.9°—wind, N.W. The minimum on the grass was 32.3° on the latter date. The rainfall was only 1.043 inches, distributed over 18 days—both rainfall and rainy days were much below the average. The average rainfall for September in the twenty-three years, 1865-87, inclusive, was 2.258 inches and the average number of rainy days was 15.0. In 1871 the rainfall in September was very large—4.048 inches on, however, only 13 days. On the other hand, in 1866, only .056 inch was measured on but three days.

High winds were noted on 8 days, but attained the force of a gale on only one occasion, the 18th. The atmosphere was foggy on the 1st, 2nd, 4th, 5th, 6th, and 16th. Heavy dews and wet fogs were experienced at night about the beginning of the month.

Quiet, but chiefly dull or foggy, weather prevailed the week ending Saturday, the 7th. At the beginning and close the distribution of atmospheric pressure in Western Europe was anticyclonic, with resulting light variable winds or calm. In the interval between Monday and Thursday, however, a number of shallow, complex depressions passed slowly eastwards across the United Kingdom, causing close thundery weather, with much fog and gloom, and a damp air. Dublin escaped all electrical disturbances, but in the S.W. of Ireland and over the greater part of England thunderstorms were felt—the rainfall accompanying them not being specially heavy, except at a few stations such as Cambridge, where .66 inch of rain was measured on Tuesday morning. Near Dublin dense vapour fog hung about the coast from Wednesday to Saturday—this latter day, proving brilliant in the extreme. In Dublin the mean height of the barometer was 30.164 inches, pressure ranging from 29.930 inches at 9 p.m. of Monday (wind S.E.) to 30.306 inches at 9 a.m. of Friday (wind S.E. by E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 58.0°, while the arithmetical mean of the daily maxima and minima was 58.9°. Temperature in the shade was on Wednesday (55.6°) and lowest on Sunday (48.5°). Rain fell in measurable quantity on Monday to the amount of .020 inch.

There was but little change in the weather of the second week, 8th to 14th, inclusive. For the most part fine bright days prevailed, with light to moderate S.W. to Northerly breezes. On Wednesday it was beautifully fine and summerlike. Temperature rose to 69.7°, and is reported to have risen to 73° at some of the Irish stations. On Saturday the barometer rose slowly with clouded sky, and Northerly to North Easterly wind; some slight drizzling rain fell; but although the cloud canopy held persistently during the day the afternoon was fine. In Dublin the mean height of the barometer was 30.163 inches, pressure ranging from 29.964 inches at 9 p.m. of Sunday (wind S.W.) to 30.430 inches at 9 a.m. of Saturday (wind N.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 60.4°. The arithmetical mean of the daily highest and lowest temperatures in the shade

was 60°. On Wednesday the thermometer in the screen rose to 69°. On Monday the lowest reading for the week occurred, and was 53°. Rain was measured on four days, the total amount being, however, only .139 inch, of which .108 inch was entered to Sunday, the 8th.

There was a marked contrast in the weather of the third week (15 to 21st inclusive) to that of the preceding one. Monday, the 6th, was cloudy but fine. Tuesday was bright and fine, but much cirrus cloud was visible, foretelling the approach of a large depression, which subsequently arrived. Towards evening on Wednesday, the 18th, the barometer fell quickly, the sky clouded over and the wind veering to the north, freshened to a moderate gale. Heavy rain fell during the night and part of Thursday. For the rest of the week the weather remained broken, being for the most part cloudy and cold; heavy showers at intervals; wind varying from N.W. to N.E., and squally. Temperature fell considerably, and continued low. Slight ground frost was experienced in some parts of England at night. In Dublin the mean height of the barometer during the week was 30.011 inches, pressure decreasing from 30.455 inches, on Sunday at 0 a.m. (wind E.), to 29.646 inches on Saturday at 9 p.m. (wind N.). The mean dry bulb temperature at 0 a.m. and 9 p.m. was 52°, the mean of the daily maxima and minima being 53°. The shade temperature rose to 62° on Wednesday and fell to 40° on Saturday. The rainfall amounted to .413 inch, on four days. The largest daily rainfall was .328 inch on Wednesday.

The weather of the period, from Sunday, the 22nd, to Saturday, the 28th inclusive, was in all respects changeable, and temperature in particular was unsteady. At the beginning the weather was clear and cold, with light northerly winds. On Monday a depression appeared off the S.W. of Ireland, whence it travelled across the S. of England to the North Sea and Denmark. It caused a considerable rainfall in Dublin (.350 inch), where the wind shifted to the northward in its wake. Over the S. and E. of England however the downpour was much greater—1.9 inches being registered at Cambridge in the 48 hours ending 8 a.m. of Wednesday. Another brief spell of clear, cold weather was followed on Thursday by freshening westerly (S.W. to N.W.) winds, a sudden and marked rise of temperature, and clouds and rain in Ireland and Scotland. On this occasion the precipitation was greatest in the N.W. and N. of Ireland—1.0 inch of rain being registered at Malin Head at 8 a.m. of Friday. Towards evening of this day the wind veered to N.W., temperature gave way, and the weather improved. In Dublin the mean height of the barometer was 29.936 inches—the extremes being—highest, 30.156 inches at 9 p.m. of Wednesday (wind, W.N.W.); lowest, 29.504 inches at 9 p.m. of Monday (wind, E.S.E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 50°. The mean of the daily maxima and minima was 60°. The shade thermometers rose to 62° on Thursday, having fallen to 38.9 on Wednesday, when the grass minimum was 32°. Rain fell on four days to the amount of .471 inch, the maximal fall in 24 hours being .350 inch on Monday.

The last two days of the month were dry and bracing, with strong northerly winds, and alternate cloud and sunshine.

The rainfall in Dublin during the nine months ended September 30th has amounted to 19.036 inches on 147 days, compared with 10.268 inches on 112 days during the same period in 1887, 17.992 inches on 131 days in 1888, and a twenty-three years' average of 19.803 inches, on 143.1 days.

At Greystones, Co. Wicklow, the rainfall in September, 1889, was 1.030 inches, distributed over only 7 days. Of this quantity, .760 inch fell on the 23rd. Since January 1, 21.120 inches of rain have fallen at Greystones, on, however, only 90 days.

OCTOBER.—A cold, rainy, squally month—westerly and south-westerly winds prevailing at first while easterly and north-easterly winds held from the 18th to the 29th. A gale of exceptional violence blew over Ireland on the night of the 6th, the wind rising from S.S.E. and subsequently veering to W. and W.N.W. There was another storm—less destructive in its effects—on the night of the 31st.

In Dublin the mean temperature (48.1°) was considerably below the average (49.8°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 47.5°. In the twenty-four years ending with 1888, October was coldest in 1880 (M. T. = 45.4°), and in 1885 (M. T. = 45.5°), and warmest in 1876 (M. T. = 53.1°). In 1886, the M. T. was as high as 52.0°; in the year 1879 (the "cold year") it was 49.7°. In 1887 it was as low as 47.3°; and in 1888, it was 49.1°.

The mean height of the barometer was 29.673 inches, or 0.174 inch below the average value for October—namely, 29.847 inches. The mercury rose to 30.205 inches at 9 p.m. of the 25th, and fell to 28.790 inches at 4 a.m. of the 7th. The observed range of atmospheric pressure was, therefore, 1.50 inches—that is, a little more than an inch and one half. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 47°, or 7° below the value for September, and 10.1° below that for August, 1880; that calculated by Kæmpe's formula from the means of the daily maxima and minima was 47°, or 2° below the average mean temperature for October, calculated in the same way, in the twenty years, 1865-84, inclusive (49.2°). The arithmetical mean of the maximal and minimal readings was 48.1°, compared with a twenty-three years' average of 49.8°. On the 7th the thermometer in the screen rose to 57.4°—wind, S.S.W.; on the 14th the temperature fell to 34.2°—wind calm. The minimum on the grass was 28.6° on the 14th. The rainfall was 4.653 inches, distributed over 22 days—both rainfall and rainy days were largely in excess. The average rainfall for October in the twenty-three years, 1865-87, inclusive, was 3.111 inches, and the average number of rainy days was 17.4. In 1880 the rainfall in October was very large—7.358 inches on 15 days. In 1876, also, 7.949 inches fell on 26 days. On the other hand, in 1884, only .634 inch was measured on but 14 days, and in 1868 only .836 inch on 15 days. In 1888 the rainfall was 1.257 inches on 16 days. A lunar rainbow was seen on the 6th. High winds were noted on 10 days, and

attained the force of a gale on four occasions, the 6th, 7th, 9th, and 31st. The atmosphere was more or less foggy in Dublin on the 10th, 14th, and 20th. Lightning was seen on the evenings of the 8th and 21st. Thunder was heard about 8 p.m. of the 21st. Hail fell with heavy showers of rain on the 7th and 25th.

Tuesday, the 1st, was a cool, fine day, with light northerly winds and dry air. On Wednesday, the 2nd, a complex series of atmospheric depressions came in from the westward over the United Kingdom, and in consequence the weather fell into a very dull and rainy state—more particularly as areas of high pressure existed both in the extreme North of Europe and over the Peninsula and South of France. At 8 a.m. of Friday, the 4th, the distribution of temperature was peculiar—at Loughborough in Leicestershire the thermometer marked 34°, at Yarmouth it was 51°, while at Bodø, in Norway (within the Arctic circle) it was as high as 58°. The rainfall was very heavy at many stations, and thunder and lightning were reported from the East and South of England on Thursday night and on Friday.

At first unsettled, stormy, and rough, the weather afterwards became quiet, cool, and fair in the week ending Saturday, the 12th. On Sunday, the 6th, the sky and clouds were a very threatening look, and in the afternoon the barometer fell at the rate of a tenth of an inch an hour, as a very deep depression approached the North of Ireland from the Atlantic. In Dublin rain fell fitfully from 8 p.m., and at 10 p.m. a furious gale burst upon the city. The wind rose from S.E. to S., but veered to S.W., and finally to W.N.W., as the night wore on. At 10.30 p.m. a lunar rainbow was seen. The gusts were at times of hurricane force, so that much damage was done, especially to trees which were still in full leaf. The minimal pressure was 28.51 inches at Mullaghmore, Co. Sligo; in Dublin the barometer read 28.79 inches at 4 a.m. of Monday. Hail fell on the afternoon of this day, which was rough and squally. During Tuesday finer weather prevailed, but lightning was seen after nightfall. A new and deep depression arrived off the North of Ireland on Tuesday, causing a renewal of bad weather. After this the barometer rose slowly in Ireland, while some secondary disturbances kept the weather unsettled in England. At 8 a.m. of Friday the thermometer read 33° at Loughborough, 35° at Parsonstown, 48° in London (where there was a dense fog), and 53° at Fawley Point. In Dublin the mean height of the barometer was only 29.865 inches—pressure decreased from 29.757 inches at 9 a.m. of Sunday (wind, W.) to 28.760 inches about 4 a.m. of Monday (wind, S.W., force 11). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 46.8°. The mean of the daily highest and lowest temperatures was 48.5°. The thermometer in the screen rose to 57.4° on Monday and fell to 39.1° on Friday. Rain fell on four days to the amount of 7.46 inch, of which .545 inch was entered to Sunday.

The earlier part of the week ending Saturday, the 19th, was calm and fair in Dublin—during the latter part a mini-storm of exceptional violence prevailed. On Monday morning the first hard-frost of the season was observed, the thermometer falling to 28.6° on the grass and to 35.2° in the screen. On Tuesday an extensive, but not deep, depression lay off the northwest of Ireland, so that the weather fell into an unsettled state, with S.W. winds and showers. Wednesday proved fine and bright, after a dull, damp, morning. In England, a heavy rainfall occurred on this day. Thursday was at first fine, afterwards showery. At night the barometer gave way decidedly, as a deep V-shaped depression slowly approached Ireland from the westward. Squally S.E. winds sprang up and a continuous rain set in, which in Dublin lasted to the close of the week. At noon on Saturday, the wind shifted from E. by S. to W. by S., as the centre of the low pressure system passed over the city. In Dublin the mean height of the barometer during the week was 29.626 inches. Pressure ranged between 29.941 inches, at 9 p.m. of Sunday (wind, W.N.W.), and 29.161 inches, at 9 p.m. of Saturday (wind, W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 48.3°. The mean of the daily highest and lowest readings of the thermometer was 49.2°. Temperature in the screen fell to 35.4° on Monday and rose to 57.3° on Tuesday. Rain fell on five days to the large amount of 2.014 inches—the measurement on Friday was .750 inch, and that on Saturday was .944 inch.

The week ended the 26th was again a period of unsettled rainy weather—especially on the east and south coasts of Great Britain and Ireland. In the central districts of the latter country, it was much finer and towards the close of the week some sharp frosts were experienced—the shade thermometer falling at Parsonstown, King's County, to 30° on Thursday and 28° on Friday. The general distribution of atmospheric pressure during the greater part of the week was peculiar—thus areas of high pressure existed over the extreme North of Europe and over the Mediterranean and Algeria, while a band of low pressure—in which there were several distinct minima—stretched across Central Europe from the south of the United Kingdom to Southern Russia. It was in this trough of low barometer that the weather was so bad. Towards the end of the week a depression was found over the Peninsula. Winter may be said to have set in over Northern Russia on Tuesday, the 22nd, when the thermometer marked 22° at 8 a.m. at Archangel. In Dublin every day was more or less showery, and on Monday evening vivid lightning was frequently seen to the southward, accompanied by thunder at 8 p.m. On Friday night there were heavy hail showers. The mean barometer reading was 29.836 inches, pressure ranging from 29.094 inches at 9 a.m. of Sunday (wind, E. by N.) to 30.293 inches at 9 p.m. of Friday (wind, N.E. by E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 47.6°. The mean temperature deduced from the daily extremes was 47.1°. The thermometer rose to 53.6° on Monday, and fell to 33.1° on Thursday. Rain was measured on every day, the total quantity being .900 inch, of which .290 inch was registered on Friday, and .331 inch on Monday.

The weather of the last few days of the month (27th–31st) varied considerably. A northerly air current held on Sunday and Monday, the 27th and 28th, in connection with a cyclonic system over the English Channel and Brittany. It caused clouds and showers on the east coasts of Great

Britain and Ireland, but inland clear skies and frosty nights prevailed. On the 29th, S.W. winds spread over the whole country; temperature rose fast, and showers and squalls set in. A severe storm occurred on the night of the 31st.

The rainfall in Dublin during the ten months ending October 31st has amounted to 24.789 inches on 169 days, compared with 12.365 inches on 123 days during the same period in 1887, 19.219 inches on 147 days in 1888, and a twenty-three years' average of 22.914 inches on 160.5 days.

At Greystones, Co. Wicklow, the rainfall in October, 1889, was no less than 6.935 inches, distributed over 22 days. Of this quantity, 1.140 inches fell on the 6th, 1.280 inch on the 18th, and .870 inch on the 19th. Since January 1st, 25.055 inches of rain have fallen at Greystones, on, however, only 112 days.

NOVEMBER.—No greater contrast can be imagined than the weather of November, 1889, compared with that of November, 1888, which was the wettest and most stormy November experienced in Dublin for more than a quarter of a century. The past month was, on the contrary, calm, dull, and comparatively mild and rainless. An anticyclone held over western Europe with unusual persistence, and the warm, damp, southerly and westerly winds of the system brought a second autumn to the British Islands after the cold and rain of October. Only at the close of the month was a spell of wintry weather experienced in the rear of a remarkable series of V-shaped depressions which passed eastwards across north-western Europe.

In Dublin the mean temperature (46.4°) was decidedly above the average (44.5°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 45.7° . In the twenty-four years ending with 1888, November was coldest in 1876 (M. T. = 38.2°), and in 1870 (M. T. = 42.2°), and warmest in 1881 (M. T. = 50.3°). In 1880, the M. T. was as high as 46.4° ; in the year 1879 (the "cold year" it was 43.2° ; in 1887 it was as low as 42.6° ; and in 1888, it was as high as 47.5° .

The mean height of the barometer was 30.191 inches, or 0.324 inch above the average value for November—namely, 29.867 inches, and 0.501 inch above the mean pressure in November, 1888—viz., 29.690 inches. The mercury rose to 30.619 inches at 9 p.m. of the 16th, and fell to 29.290 inches at 7 p.m. of the 24th. The observed range of atmospheric pressure was, therefore, 1.329 inches—that is, a little more than an inch and three-tenths. The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 45.7° , or only 1.8° below the value for October, and 0.4° below that for September, 1889; that calculated by Kaemtz's formula from the means of the daily maxima and minima was 45.6° , or 1.9° above the average mean temperature for November, calculated in the same way, in the twenty years, 1865–84, inclusive (43.7°). The arithmetical mean of the maximal and minimal readings was 46.4° , compared with a twenty-three years' average of 44.5° . On the 7th the thermometer in the screen rose to 59.7° —wind, W.S.W.; on the 28th the temperature fell to 29.6° —wind, W. The minimum on the grass was 23.9° on the 28th. The rainfall was only .929 inch, distributed over 9 days—both rainfall and rainy days fell largely short of the values for the preceding month of October—viz., 4.853 inches on 22 days. The average rainfall for November in the twenty-three years, 1865–87, inclusive, was 2.340 inches, and the average number of rainy days was 16.9. The rainfall and the rainy days, therefore, were very much below the average. In 1876 the rainfall in November was large—3.614 inches on 20 days. In 1872, also, 3.414 inches fell on 24 days; in 1887, 3.012 inches fell on 18 days, and in 1888, 6.340 inches fell on 26 days. On the other hand, in 1870, only 1.278 inches were measured on but 11 days, and in 1879 only 1.251 inches on but 10 days. The vast excess of the rainfall in 1888 and the equally marked deficit in 1889 are evident from these figures.

A lunar halo appeared on the 4th, and a solar halo on the 14th. High winds were noted on 5 days, but attained the force of a gale on only one occasion, the 1st. The atmosphere was more or less foggy in Dublin on the 11th, 13th, 14th, 16th, 17th, 18th, 19th, 23rd, and 30th. Lightning was seen on the night of the 23th. Hail fell on the 1st. Sleet and snow fell on the 26th and 27th. An aurora borealis was seen on the night of the 26th.

The month opening with a strong S.W. gale—the only storm which was felt throughout in Dublin. It was followed by a transitory fall of temperature and some cold showers.

Westerly winds, and dull, mild weather were the leading features of the week ending Saturday, the 9th. At first an irregular depression was passing across Great Britain eastwards; it was rainy in England, showery in Ireland, fair and cold over the greater part of Scotland. Monday, the 4th, was cool and fair in Dublin. Some rain fell on Tuesday morning, but this day also proved fine. On Wednesday morning a large Atlantic anticyclone was found off the South of Ireland, whence it extended across the Bay of Biscay to the North of Spain. On the afternoon of this day temperature rose decidedly, and the weather became warm and damp—remaining so until the end of the week. At 8 a.m. of Thursday the thermometer read 31° at Paris, but 50° at Aberdeen, where it rose to 62° later in the day. This remarkable reading for November was also recorded at Loughborough. Even in Northern Russia very little frost was felt during this period. In Dublin the mean height of the barometer was 30.172 inches. Pressure increased from 29.544 inches, at 9 a.m. of Sunday (wind, W. by S.) to exactly one inch higher, namely, 30.544 inches at 9 a.m. of Friday (wind, W.S.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 49.7° , and the mean of the daily extremes of temperature was 50.4° . The thermometer in the shade rose to 59.7° on Thursday, having fallen to 39.3° on Monday. Rain fell on two days to the amount of .068 inch, of which .050 inch was entered to Friday. At 8 a.m. of that day the barometer read 30.61 inches at Lorient, and 30.60 inches at Rochefort and at Valencia, in Kerry.

The second week (10th–16th, inclusive) was a period of singularly mild, quiet, weather. The distribution of atmospheric pressure was anticyclonic, except in the far North, where depressions were found—of, however, no great intensity. At the beginning of the period, the centre of a large anticyclone, in which the barometer was as high as 30.50 inches, lay off the extreme S.W. of Ireland.

The weather was dull and mild. This high pressure system then moved eastwards, decreasing at the same time in intensity. By Tuesday morning its centre had reached Prussia. A sharp morning frost with fog prevailed over central England on this day, but in Ireland it remained very mild, dull, and damp. Up to and including Friday, the 15th, the anticyclone held over the continent. On this day a V-shaped depression of no great depth came in over Ireland from the Atlantic. A squally S.W. wind and showers were the result, but the barometer quickly recovered, and Saturday was bright and still, with light winds from N.W. to N.E. and a smoke fog at night. In Dublin the mean height of the barometer was 30.351 inches. Pressure ranged from 30.196 inches at 9 p.m. of Thursday (wind, S.S.W.), to 30.619 inches at 9 p.m. of Saturday (wind, calm). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 48.5°. The mean of the daily highest and lowest shade temperatures was 49.1°. The thermometer rose to 55.7° on Friday, and fell to 41.8° on Saturday. Rain fell on Friday night to the amount of .030 inch—this was the only measurable rainfall during the week. The air was foggy on Monday, Wednesday, Thursday, and Saturday. A solar halo was seen on Thursday forenoon.

Quiet, mild, damp, and foggy weather held during the greater part of the third week (17th–23rd inclusive). Only on the evening of Thursday, the 21st, did the wind freshen to a squally or stiff breeze, which reached the force of a gale in the West of Ireland. In England, Germany, and France temperature decreased greatly as the week advanced; but the season remained singularly open in Scotland and even in Scandinavia. This was brought about by the persistent presence of a large anticyclone over Western Europe. In its centre, which lay over Germany, the barometer remained above 30.70 inches from Sunday night until Thursday afternoon—the highest reading of all being 30.76 inches, recorded at Berlin and Wiesbaden on Wednesday. On Thursday night a V-shaped depression advanced over Ireland from the S.W. It caused the strong winds above referred to and a heavy fall of rain on Friday. In the rear of this low pressure system, of no great depth, the barometer again rose quickly and the sky cleared with a sudden fall of temperature. Saturday was at first fair and bright, but in the afternoon a dense vapour fog formed. In Dublin the mean height of the barometer was 30.413 inches, pressure ranging from 30.618 inches at 9 a.m. of Sunday (wind, calm) to 30.038 inches at 9 a.m. of Friday (wind, S. by W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 46.3°. The mean of the daily highest and lowest temperatures was 47.6°. The screened thermometers rose to 57.5° on Friday, having fallen to 30.3° on Sunday. Rain was measured on three days, the total quantity being .463 inch, and the maximal fall in 24 hours being .359 inch on Friday.

A remarkable and sudden change from autumn to winter took place at the beginning of the last week ending Saturday, the 30th. It proved wintry in the extreme. On Sunday a general and decided fall of the barometer over Western Europe ushered in a complex series of V-shaped depressions, which at 9 a.m. of Monday extended as a trough of low pressure from the W. coast of Norway to the S. of France. In front of this trough the wind was strong from S. and S.W., with comparatively high temperature and rain—in its rear, fresh N.W. and N. winds were blowing, with a keen, dry air and showers of sleet, hail, and snow. On Monday night thunder and lightning occurred in the North-west of England. At 8 a.m. of Tuesday the barometer was down to 28.52 inches at Bodø in Norway—a frost prevailed, with snow squalls in many places. At night displays of aurora and lightning were reported from Ireland and Scotland. Wednesday was a very cold day—temperature did not rise above 35.6° in Dublin. On Thursday an anticyclone passed south-eastwards across Munster, temperature rose and S.W. winds became established in Ireland. In Dublin the mean height of the barometer was 29.964 inches—pressure ranging between 29.230 inches at 7 p.m. of Sunday (wind, S.W.) and 30.337 inches at 9 a.m. of Thursday (wind, W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 38.9°. The mean of the daily highest and lowest thermometer readings was 38.9°. Temperature rose to 52.5° on Sunday, and fell to 29.6° on Thursday. Lightning was seen on Monday night, rain fell on Sunday to the amount of .276 inch. Light sleet and snow showers on Monday, Tuesday, and Wednesday yielded no measurable rainfall.

The rainfall in Dublin during the eleven months ending November 30th has amounted to 25.718 inches on 178 days, compared with 15.378 inches on 141 days during the same period in 1887, 25.768 inches on 173 days in 1888 and a twenty-three years' average of 25.254 inches on 177.4 days.

At Greystones, Co. Wicklow, the rainfall in November, 1889, was 1.080 inches distributed over 9 days. Of this quantity .440 of an inch fell on the 23rd, and .240 of an inch on the 24th. Since January 1, 29.135 inches of rain have fallen at Greystones, on, however, only 121 days.

DECEMBER.—A quiet, mild, but damp month, with prevalent south-westerly winds (that is, winds from points between S. and W.). These conditions were determined by the persistence of an anticyclone to the eastward and south-eastward, while numerous areas of low pressure skirted the western shores of Ireland, Scotland, and Norway in their passage north-eastwards across the Atlantic Ocean and the Norwegian Sea. In central and southeastern England sharp frost was felt towards the close of the month, while the weather remained open in Ireland and Scotland.

In Dublin the mean temperature (43.8°) was—as in November—above the average (41.1°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 43.3°. In the twenty-four years ending with 1888, December was coldest in 1878 (M. T. = 32.6°), and in 1874 (M. T. = 36.6°), and warmest in 1865 (M. T. = 46.2°). In 1886, the M. T. was as low as 37.9°; in the year 1879 (the "cold year") it was also 37.9°. In 1887 the M. T. was 39.9°; in 1888 it was 43.6°; or very nearly the same as in 1889.

The mean height of the barometer was 30.006 inches, or 0.214 inch above the average value for December—namely, 29.882 inches. The mercury rose to 30.730 inches at 9 p.m. of the 5th, and fell to 29.260 inches at 3 p.m. of the 16th. The observed range of atmospheric pressure was, therefore, 1.470 inches—that is, a little less than one inch and a-half. The mean temperature deduced from

daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 43°3', or 2°4' below the value for November, and 4°2' below that for October, 1889; that calculated by Kaemtz's formula from the means of the daily maxima and minima was 42°9', or 2°4' above the average mean temperature for December, calculated in the same way, in the twenty years, 1865-84 inclusive (40°5'). The arithmetical mean of the maximal and minimal readings was 43°8', compared with a twenty-three years' average of 41°1'. On the 17th the thermometer in the screen rose to 56°6'—wind, W.S.W.; on the 6th and the 12th the temperature fell to 30°9'—wind S.S.W. on both occasions. The minimum on the grass was 22°9' on the 12th. There were 4 days of frost in the screen and 20 days of frost on the grass.

The rainfall was 1·554 inches, distributed over 15 days. The average rainfall for December in the twenty-three years, 1865-87, inclusive, was 2·419 inches, and the average number of rainy days was 17·0. The rainfall, therefore, was decidedly below the average, while the rainy days were also below it. In 1878 the rainfall in December was very large—7·566 inches on 22 days. In 1872, 4·332 inches fell on as many as 24 days; and in 1868 (which was otherwise a fine and dry year), 4·740 inches fell on as many as 27 days. On the other hand, in 1867, only 771 of an inch was measured on 13 days; and in 1871, the December rainfall was only 797 of an inch on 15 days. In 1885, only 742 of an inch of rain was measured on but 10 days, but in 1886 the rainfall was 3·348 inches, distributed over as many as 21 days. In 1887 ("the dry year"), the rainfall was 1·223 inches on 10 days; in 1888, it was 2·011 inches on 17 days.

A lunar halo appeared on the 31st. High winds were noted on 13 days, and attained the form of a gale on only two occasions, the 12th and the 19th. The atmosphere was more or less foggy in Dublin on the 5th, 6th, 14th, 15th, 21st, 29th, and 30th. Lightning was seen on the night of the 12th. A little sleet fell on the 28th.

Almost throughout the first week (1st-7th, inclusive) atmospheric pressure was abnormally high over Europe. On Thursday, the 5th, indeed, the barometer read 31·00 inches and upwards in Central Russia, and exceeded 30·50 inches all over Scandinavia, Northern Germany, and the British Islands. Considerable cold existed within the limits of this vast anticyclone. It was most intense in a band stretching from the north and centre of Russia to Sweden as well as through Germany to France. At the beginning of the week the weather was dull, mild, and windy in Ireland, which was under the influence of atmospheric depressions passing northwards across the Atlantic; while calms or light S.E. to E. winds and sharp frosts prevailed in England. On Tuesday temperature gave way in Ireland also, and frosts occurred on Thursday and Friday. During the afternoon of the latter day a S.W. wind freshened, temperature rose, and rain set in. Saturday was fair, bright, and cold in Ireland, snowy in England. In Dublin the mean height of the barometer was 30·335 inches—pressure ranging between 30·215 inches at 9 a.m. of Sunday (wind, S.) and 30·750 inches at 9 p.m. of Thursday (wind also S.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 40°9'. The mean of the daily highest and lowest shade temperatures was 41·7. The thermometer rose to 49°6' on Sunday and fell to 30°9' on Friday. Rain fell on Friday to the amount of 2·49 inch; and on the morning of Sunday, the 8th, to the amount of 4·00 inch—total measurement, 2·70 inch, on two days.

Particularly changeable weather prevailed in all districts during the second week (8th-14th inclusive) pressure, temperature, and wind being variable beyond measure. Several extensive and even deep depressions travelled north-eastwards across the Atlantic, British Isles, and Scandinavia—as these systems approached, the wind became southerly, temperature rose, clouds increased, and rain fell; as they passed away the wind veered to W. and N.W. and fell light, with clearing skies and frost. Sunday was dull and rainy. Monday was showery with fine intervals. Tuesday and Wednesday were cold and fair. Thursday was at first frosty—then rainy, with squalls; lightning was seen in the evening. Friday was a fine, cold day. Saturday was frosty and foggy in the forenoon; cloudy and milder in the afternoon. In Dublin the mean height of the barometer was 29·807 inches—pressure ranged from 30·226 inches at 9 a.m. of Sunday (wind, S.W.) to 29·260 inches at 3 p.m. of Tuesday (wind, W.N.W.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 41·2'. The mean of the daily maxima and minima was 41·8'. On Monday the thermometer in the screen rose to 53°9', on Thursday they fell to 30°9'. The lowest temperature on the grass was 22°9' on Thursday. The rainfall amounted to 3·33 inch, on four days. Of this amount, 1·80 inch was registered on Sunday and 1·00 inch on Thursday. There was a dense smoke fog on the forenoon of Saturday and lightning occurred on Thursday evening.

A south-westerly air-current and open unsettled weather prevailed throughout the third week ending Saturday, the 21st. Atmospheric pressure was persistently high over France and Germany, low to the north-westward of the British Isles and over Norway. In the area covered by the high pressure, calms or variable winds and hard frosts prevailed. In the British Isles and Scandinavia, on the contrary, equally winds between S.W. and N.W. and frequent showers, with but little frost, were prevalent. Sunday was a cool foggy day in Dublin—the max. temp. being only 41·8'. Monday was mild and damp, and at night the thermometer rose to 55°. The next three days were equally; on Thursday evening rain fell heavily all over Ireland and in parts of Great Britain later on. Friday was clear and cold. Saturday—at first fine—proved wet and dull in the afternoon. In Dublin the mean height of the barometer was 30·025 inches—pressure ranging from 30·403 inches at 9 a.m. of Sunday (wind, W., light) to 29·451 inches at 9 p.m. of Saturday (wind, S.E.). The mean dry bulb temperature at 9 a.m. and 9 p.m. was 44·9'. The mean of the daily max. and min. readings of the screen thermometers was 44·7'. The absolute maximum was 56°6' on Tuesday; the absolute minimum was 34°6' on Sunday. Rain fell on five days to the amount of 6·54 inch—the heaviest falls in 24 hours being 2·74 inch on Thursday and 2·51 inch on Saturday. There was a very dense fog over the city on Sunday.

During the week ended Saturday, the 28th, the distribution of atmospheric pressure was of a mixed type—at first chiefly cyclonic, especially in the far N. and N.W.; afterwards anticyclonic. The weather was generally open, and on Christmas Day frost was absent from the British Isles, France, Western Germany, and the greater part of Scandinavia. This was the more remarkable as on the 23rd and 24th very low temperatures were reported from the Gulf of Bothnia, the 8 a.m. readings on those days at Haparanda being $+7^{\circ}$ and -4° F. respectively. Up to and including Tuesday, the 24th, rain fell very generally—the weather afterwards became unusually dry, mild and quiet. In Dublin, Sunday was dull and damp. Monday showed an improvement, but at night there were squalls and rain. Christmas Eve was bright and bracing, and three beautiful days followed—mild, sunny, and dry, quite unlike midwinter. Saturday was dull, cold, and showery, with light variable winds. In Dublin the mean height of the barometer was 30.109 inches, pressure ranging from 29.460 inches at 9 a.m. of Sunday (wind, S.W.) to 30.473 inches at 9 p.m. of Thursday (wind, S.S.W.). At 8 a.m. next morning (Friday) readings as high as 30.94 inches at Wisby, in Gothland, and 30.50 inches at Stockholm, were recorded. In Dublin the mean dry bulb temperature at 9 a.m. and 9 p.m. was 45° F. The mean of the daily highest and lowest temperatures was 45° F. The screened thermometers rose to 55° F. in the night of the 23rd-24th, and fell to 37° F. on Saturday. The rainfall amounted to .287 inch, and was distributed over three days—.173 inch fell on Monday, and .090 inch on Saturday.

The last three days of the month were mild and chiefly fine in Dublin, while severe frost prevailed in the S.E. and centre of England.

The rainfall in Dublin during the year ending December 31st amounted to 27.472 inches on 158 days, compared with 28.679 inches on 190 days in 1888, 16.601 inches on 160 days in 1887, and a twenty-three years' average of 27.073 inches on 194.4 days.

At Greystones, Co. Wicklow, the rainfall in December, 1888, was 2.125 inches distributed over 11 days. Of this quantity .580 of an inch fell on the 28th, .350 of an inch on the 13th, and .320 of an inch on the 19th. During the year 31.260 inches of rain fell at Greystones, on, however, only 132 days. In 1888 the corresponding figures were 34.540 inches of rain on 138 days.

RAINFALL IN 1888.

At 40, Fitzwilliam-square, West, Dublin.

Rain Gauge:—Diameter of funnel, 8 in. Height of top—Above ground, 3 ft. 2 in.; above sea level, 57 ft.

Month.	Total Depth.	Greatest Fall in 24 hours.		Number of Days on which .01 or more fell.	Month.	Total Depth.	Greatest Fall in 24 hours.		Number of Days on which .01 or more fell.
	Inches.	Depth.	Date.			Inches.	Depth.	Date.	
January. . .	.9115	1.091	11th	16	August. . .	.7747	1.043	20th	22
February. . .	2.440	.762	20th	20	September. . .	1.042	.325	22nd	18
March. . .	1.058	.682	10th	17	October. . .	.8263	.744	30th	22
April. . .	.6487	.409	11th	21	November. . .	.928	.989	22nd	8
May. . .	.2181	.506	23d	17	December. . .	1.426	.234	29th	22
June. . .	.160	.022	23d	6					
July. . .	.2529	.074	22nd	25	Total. . .	27.472	—	—	212

The rainfall was four-tenths of an inch in defect of the average annual measurement of the twenty-three years, 1865-87, inclusive—viz., 27.073 inches.

It will be remembered that the rainfall in 1887 was very exceptionally small—16.601 inches, the only approach to this measurement in Dublin being in 1870, when only 20.839 inches fell, and in 1884, when the measurement was 20.467 inches. In seven of the twenty-three years in question the rainfall was less than 26 inches, and in 1885 it was 26.614 inches.

The scanty rainfall in 1887 was in marked contrast to the abundant downpour in 1886, when 32.966 inches—or as nearly as possible double the fall of 1887—fell on 220 days. Only twice since these records commenced has the rainfall in Dublin exceeded that of 1886—namely, in 1872, when 35.966 inches fell on 238 days, and in 1880, when 34.512 inches were measured on, however, only 138 days.

In 1889, there were 193 rainy days, or days upon which not less than .01 inch of rain (one hundredth of an inch) was measured. This was slightly in defect of the average number of rainy days, which was 194.4 in the twenty-three years, 1865-87, inclusive. In 1888—the warm dry year of recent

times—as well as in 1887, the rainy days were only 160, and in 1870 they were only 145. In 1868, however, the rainfall amounted to 24·085 inches, or more than 8 inches above the measurement in 1887, and even in 1870, 20·839 inches were recorded. Included in the 193 rainy days in 1889 are 15 on which snow or sleet fell, and 23 on which there was hail. In February hail was observed on 7 days, in March on 5 days, and in April on 4 days. Hail also fell twice in January and October, and once in May, July, and November. Snow or sleet fell on 1 day in January, on 8 days in February, on 2 days in March, on 1 day in April, on 2 days in November, and on 1 day in December. Thunder and lightning occurred on five occasions during the year—once in April, July, and October, and twice in August. Lightning was also seen on one occasion in each of the last three months of the year.

The rainfall was distributed as follows:—5738 inches fell on 53 days in the first quarter, 4633 inches on 44 days in the second, 9360 inches on 50 days in the third, and 7330 inches on 46 days in the fourth and last quarter.

Of the 9360 inches which fell in the third quarter of the year, 5747 inches were measured in August.

Abstract of Meteorological Observations taken at Dublin (40, Pinelane-square, West), during the Year 1889.

Month.	Abs. Hum.	Date.	Abs. Sols.	Date.	Mean Daily Max.	Mean Daily Min.	Rainfall.	Rainy Days.	Mean Height of Barometer.	Highest Pressure.	Date.	Lowest Pressure.	Date.	Prevailing Winds.
January.	80°	10th	57°	2nd	46°	30°	2513	18	30280	30735	2nd	30390	8th	W., S.W.W.
February.	80°	1st	51·7	21th	47°	32°	2440	36	30311	30774	4th	30708	10th	S.W., W.
March.	80°	20th	51°	2r	47°	30°	1708	17	30309	30746	18th	30744	18th	S.W., W.
April.	80°	23th	52°	25th	52°	40°	2207	41	30716	30712	18th	30700	4th	S.W.W., N.W.
May.	77°	21st	49°	21th	50°	40°	2311	17	30736	30713	30th	30640	24th	S., S.E., E.
June.	74°	21st	41°	21th	47°	30°	2320	2	30707	30640	21st	30611	2nd	E., N.E.
July.	77°	2th	42°	2th	47°	31°	2372	18	30764	30730	1st	30640	2th	N.W., W.
August.	71°	1st	44°	21th	54°	37°	2717	33	30662	30768	22nd	30618	21st	N.W., W., W.S.W.
September.	69°	10th	39°	30th	50°	37°	2042	12	30684	30748	10th	30704	22nd	N.W., S., W.
October.	67°	7th	39°	14th	42°	42°	1968	20	30705	30712	14th	30720	21st	W., S.W.
November.	69°	7th	39°	28th	51°	37°	1982	2	30711	30712	28th	30720	21st	W., S.W.
December.	64°	17th	30°	21th-21th	47°	30°	1824	21	30706	30730	21st	30720	10th	W., S.W., S.
Extreme, Rain, and Snow.	77°	July 2th	51·7	Feb. 11th	59°	46°	2523	Days 126	Ins. 30730	Ins. 30780	Dec. 21st	Ins. 30700	Oct. 7th	W., S.W.

Long. 12° 27' W., Lat. 53° 27' N., Height above Mean Sea Level, 55 feet, Thermometer, 4 feet above ground, Wind Glass, 5 feet 5 inches above ground.

Month.	Barometer corrected.	Air Temperature.										Temperature of Surface.			Temperature of Clouds.			Radiation.			Winds.						Waves.									
		Max.			Mean.			Min.			Wet Bulb.			Dry Bulb.			Total.			Direction.						Force of Direction.										
		1.	2.	3.	1.	2.	3.	1.	2.	3.	1.	2.	3.	1.	2.	3.	1.	2.	3.	N.	S.E.	E.	S.W.	W.	N.W.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	
January.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
February.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
March.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
April.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
May.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
June.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
July.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
August.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
September.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
October.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
November.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
December.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	
Yearly.	30.05	32.0	34.0	36.0	34.0	35.0	33.0	31.0	30.0	29.0	30.0	29.0	28.0	31.0	30.0	29.0	30.0	29.0	28.0	N.	N.E.	E.	S.E.	S.	S.W.	1	2	3	4	5	6	7	8	9	10	

TABLE showing the Monthly and Yearly Rainfall at Dublin during the Twenty-one Years 1869 to 1889, inclusive; with the Means for the Twenty Years 1869 to 1888.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Rainfall.
1869.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
1869.	9.855	1.813	3.022	1.400	2.614	7.11	7.93	3.845	5.960	2.074	1.500	5.194	57.089
1870.	3.847	1.440	1.780	3.883	1.717	7.09	5.63	1.614	1.904	3.784	1.918	4.463	37.088
1871.	5.686	1.948	4.12	2.642	7.19	2.803	2.638	3.893	4.045	3.617	1.565	7.91	37.088
1872.	3.944	1.937	2.615	2.642	3.904	3.975	1.955	4.582	2.464	3.032	3.454	4.923	35.550
1873.	4.023	4.85	2.351	4.63	7.57	3.88	3.408	3.844	3.705	3.933	3.003	3.89	33.010
1874.	3.018	2.888	1.88	2.813	3.757	4.06	3.818	4.548	1.763	2.908	3.173	3.201	37.441
1875.	3.141	2.677	1.940	1.608	1.671	3.080	3.791	2.853	3.180	2.618	3.051	1.905	39.950
1876.	4.65	3.118	2.183	3.051	7.85	3.943	1.937	3.816	3.140	4.505	3.118	17.446	37.641
1877.	4.353	2.910	3.745	4.737	3.940	3.21	3.860	3.932	1.715	3.433	3.485	3.880	37.641
1878.	1.367	2.375	1.857	4.050	4.420	3.938	5.60	4.642	1.584	3.058	1.881	2.915	36.985
1879.	1.714	3.935	1.357	1.937	3.045	4.948	4.617	4.744	4.360	2.923	1.381	1.973	36.985
1880.	3.02	3.841	3.140	1.939	3.47	3.144	3.837	1.401	3.001	3.788	3.368	3.768	36.985
1881.	1.968	3.979	1.488	1.552	1.923	3.972	1.858	4.758	1.899	3.428	3.179	1.238	37.043
1882.	3.475	1.983	3.150	3.843	1.951	3.544	3.722	1.913	4.853	3.904	3.444	3.103	37.128
1883.	3.475	3.788	1.555	3.867	4.021	3.433	3.937	3.919	3.919	3.019	3.074	1.237	36.981
1884.	3.688	3.913	1.988	3.935	1.343	3.343	3.230	7.77	1.754	3.64	1.453	3.058	36.981
1885.	3.617	3.838	1.590	3.931	3.823	3.559	1.114	3.930	3.463	3.403	3.968	7.42	37.114
1886.	3.344	1.961	3.038	3.458	3.478	1.959	1.702	3.908	3.471	3.122	3.180	3.348	37.114
1887.	1.315	3.41	3.418	1.785	3.82	3.312	3.134	1.932	3.115	3.485	3.019	1.152	36.985
1888.	1.247	1.957	3.052	1.982	3.79	3.040	3.541	1.979	2.91	1.237	3.840	3.115	36.979
Means.	3.153	3.184	1.957	3.082	1.918	1.983	2.478	3.643	3.583	3.124	2.947	2.435	37.043
1889.	3.211	3.440	1.279	4.037	3.151	1.60	3.703	3.747	1.940	4.483	3.60	1.314	37.073

* June, 1867, was the driest month of the twenty-one years.

† July, 1871, was the wettest month of the twenty-one years.

+ December, 1871, was the month of the heaviest rainfall.

‡ Heaviest rainfall in 24 hours—4.710 inches, on October 27th, 1867.

TABLE showing the Monthly and Yearly Number of Rainy Days* at Dublin during the Twenty-one Years 1869 to 1889, inclusive; with the Means for the Twenty Years 1869 to 1888.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Rainy Days.
1869.	13	18	17	14	19	11	9	10	21	11	17	20	188
1870.	14	18	11	8	14	9	8	7	11	18	11	18	145
1871.	20	18	12	20	6	18	18	19	13	18	14	18	191
1872.	23	20	21	12	22	10	19	17	22	22	24	24	238
1873.	21	8	22	8	17	15	25	25	16	18	16	7	189
1874.	14	12	12	18	16	6	10	18	18	22	10	18	184
1875.	23	17	14	12	18	20	18	16	14	26	10	18	205
1876.	9	23	20	17	6	14	10	14	17	20	20	312	192
1877.	23	10	20	21	15	15	22	24	10	18	22	17	212
1878.	23	14	17	16	28	10	8	22	16	18	11	10	206
1879.	10	20	16	17	22	14	24	12	18	14	10	10	205
1880.	8	17	16	20	9	18	24	20	18	18	20	16	188
1881.	14	18	17	18	15	21	15	21	13	18	18	18	196
1882.	17	14	17	20	16	25	25	21	18	20	24	21	227
1883.	20	17	15	10	18	18	20	14	14	16	19	18	188
1884.	18	20	17	11	16	10	25	8	14	14	14	20	187
1885.	28	10	16	16	28	8	10	14	20	02	17	10	188
1886.	28	18	18	15	21	15	18	18	16	24	18	21	220
1887.	15	11	18	10	10	15	18	10	16	11	18	10	180
1888.	9	14	18	17	11	18	22	12	16	16	26	17	180
Means.	17.4	16.7	16.4	14.7	15.7	15.2	15.0	18.0	18.1	17.4	17.6	16.7	192.5
1889.	16	20	17	21	17	8	15	22	18	20	0	18	196

* A day on which it has, or upwards, of rain fell within the 24 hours.

† Driest month of the twenty-one years. Rainfall = .797 inch.

‡ Wettest month of the twenty-one years. Rainfall = 4.021 inches.

§ Month of the heaviest rainfall = 7.468 inches.

TABLE showing the Temperature of the Air in Dublin in 1889, and the Average Temperature for the Twenty Years 1869 to 1888, inclusive, as recorded by Dr. J. W. Moore.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
1869, . . .	43.4	45.5	42.5	45.1	47.5	54.9	51.9	53.9	48.0	51.1	44.3	50.1	49.3
1870, . . .	40.7	50.0	43.8	44.6	53.0	58.5	62.1	59.3	50.1	49.4	48.8	56.7	49.0
1871, . . .	57.5	45.5	45.5	48.7	52.8	56.0	59.2	60.6	53.5	50.7	43.6	41.4	49.5
1872, . . .	41.4	45.2	45.1	47.6	49.3	55.2	51.3	56.9	54.5	45.5	42.5	41.4	49.2
1873, . . .	42.3	57.1	42.0	45.3	50.7	57.5	53.9	59.3	53.0	47.1	46.1	44.7	45.9
1874, . . .	42.5	41.5	45.8	49.2	49.5	50.3	49.5	55.5	51.5	49.5	48.5	53.1	49.2
1875, . . .	45.5	40.5	45.1	45.4	55.7	55.5	57.5	60.5	57.5	49.5	45.5	50.4	45.5
1876, . . .	42.5	41.5	40.2	43.0	49.4	55.7	60.7	58.9	51.9	52.4	48.5	44.0	45.1
1877, . . .	43.4	43.9	41.4	45.3	46.7	57.3	57.8	57.4	52.4	50.1	45.0	41.5	45.7
1878, . . .	42.4	43.9	45.5	47.5	52.4	57.2	51.5	58.5	55.5	50.7	37.5	35.0	45.5
1879, . . .	54.7	39.5	41.5	43.7	47.5	54.5	55.5	50.5	53.5	49.0	40.1	37.5	49.4
1880, . . .	33.0	44.5	44.4	45.8	51.0	50.0	57.9	60.5	57.5	44.5	45.4	41.5	49.9
1881, . . .	59.4	59.8	45.5	44.7	53.3	55.3	59.0	55.0	55.5	47.2	49.4	59.8	47.7
1882, . . .	55.5	45.4	45.9	48.0	52.0	54.7	55.5	55.2	52.0	49.5	43.7	37.4	45.9
1883, . . .	43.4	49.6	50.0	45.5	50.5	55.5	55.9	53.5	54.5	49.0	43.5	41.5	49.9
1884, . . .	44.5	42.4	44.5	43.5	51.3	50.5	59.7	60.5	56.9	49.5	43.5	40.5	48.5
1885, . . .	40.5	49.7	40.7	45.5	47.4	54.5	59.5	55.9	58.2	44.5	40.1	41.5	47.5
1886, . . .	37.1	38.9	40.5	45.1	49.9	54.5	59.5	59.5	50.1	51.2	40.7	39.0	47.9
1887, . . .	40.7	41.5	40.3	43.5	50.5	50.5	62.4	59.5	53.0	45.5	41.5	39.1	49.5
1888, . . .	41.3	37.9	38.9	44.7	51.2	53.1	58.5	57.0	53.4	48.1	45.5	42.7	47.5
Average, . .	45.9	45.1	43.4	45.5	50.5	53.2	57.5	57.5	54.5	45.9	42.9	39.5	45.5
1869, . . .	51.5	59.4	45.0	45.9	55.4	55.2	57.4	57.5	54.5	47.9	45.5	42.9	45.9

N.B.—The temperatures given above were deduced from the maximal and minimal readings of the Thermometer by Kew's Formula, viz.—
 $\text{min.} + \left\{ \frac{\text{max.} - \text{min.}}{10} \right\} = \text{Mean Temperature.}$

Dublin Castle,
8th July, 1890.

SIR,

I have to acknowledge the receipt of your letter of the 7th instant, forwarding, for submission to His Excellency the Lord Lieutenant, the Agricultural Statistics of Ireland for the year 1889.

I am, Sir,

Your obedient Servant,

W. RIDGEWAY.

The Registrar-General,
Charlemont House,
Rutland-square.

DESIGNS : Printed for Her Majesty's Stationery Office,
By ALEX. THORN & Co. (Limited), 87, 88, and 89, Abney-street,
The Queen's Printing Office.